

## Group 7.—PAPER AND ALLIED PRODUCTS

**Description of the group of industries.**—This group of industries embraces establishments engaged primarily in the manufacture of pulp (wood and other fiber), of paper and paperboard, and in the further manufacture of paper and paperboard into commodities such as boxes, bags, etc. (designated as "converted paper products"), and also covers the manufacture of pulp goods (pressed and molded).

The manufacture of converted paper products is carried on to a considerable extent in paper mills, but the establishments engaged solely or primarily in this line of manufacture purchase their principal materials—paper and paperboard—from paper mills. Thus, a large amount of duplication in the figures for cost of materials and value of products results from the fact

that products of pulp mills are used as materials in paper mills and, to a large extent, the products of paper mills are used as materials in converting plants which purchase their principal materials from the paper mills. This should be borne in mind when making use of these figures.

The following individual industries make up the paper and allied products group in the Census of Manufactures for 1939: Pulp mills; Paper and paperboard mills; Coated and glazed paper; Envelopes; Paper bags, except those made in paper mills; Fiber cans, tubes, and similar products; Paperboard containers and boxes not elsewhere classified; Die-cut paper and paperboard, and converted cardboard; Wallpaper; Converted paper products not elsewhere classified; and Pulp goods (pressed, molded).

# PAPER AND ALLIED PRODUCTS

633

## SUMMARY FOR GROUP 7.—PAPER AND ALLIED PRODUCTS: 1899 TO 1939

CENSUS YEAR	Number of establishments	Wage earners (average for the year)	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work <sup>1</sup>	Value of products	Value added by manufacture <sup>2</sup>	Horsepower of prime movers
1939.....	3,279	264,716	\$309,856,579	\$1,149,666,420	\$2,019,568,217	\$869,901,797	2,792,900
1937 <sup>3</sup> .....	3,084	266,944	310,136,540	1,213,558,936	2,076,425,001	862,866,065	( <sup>4</sup> )
1935.....	2,945	235,665	235,724,527	887,346,049	1,523,186,440	635,840,391	( <sup>5</sup> )
1933.....	2,697	196,380	172,841,982	654,646,541	1,172,742,984	518,096,443	( <sup>6</sup> )
1931.....	2,883	194,581	214,337,492	768,010,033	1,367,582,014	599,571,981	( <sup>6</sup> )
1929.....	3,126	233,393	287,330,792	1,092,722,103	1,892,251,148	799,529,045	( <sup>6</sup> )
1927.....	2,807	224,437	272,153,670	973,808,612	1,677,442,980	703,634,368	( <sup>6</sup> )
1925.....	2,727	221,502	263,097,369	919,657,498	1,546,814,124	627,156,626	( <sup>6</sup> )
1923.....	2,685	219,026	250,144,000	878,763,995	1,456,970,076	578,206,081	( <sup>6</sup> )
1921.....	2,600	184,756	202,702,800	669,070,172	1,071,800,316	402,730,144	( <sup>6</sup> )
1919.....	2,677	208,115	212,724,291	720,908,211	1,250,445,203	529,536,992	( <sup>6</sup> )
1914.....	2,452	166,752	88,844,233	314,832,826	519,689,071	204,856,845	( <sup>6</sup> )
1909.....	2,412	144,790	67,694,260	242,669,896	413,126,106	170,456,210	( <sup>6</sup> )
1904.....	2,098	121,202	51,472,423	162,270,553	285,796,867	123,526,314	( <sup>6</sup> )
1899.....	1,942	94,266	35,682,226	107,758,784	198,183,268	90,424,484	( <sup>6</sup> )
SUBGROUPS, INDUSTRIES, AND CENSUS YEAR							
SUMMARY FOR SUBGROUPS AND FOR INDIVIDUAL INDUSTRIES							
PULP MILLS AND PAPER AND PAPERBOARD MILLS:							
1939.....	832	137,445	\$175,687,842	\$676,997,167	\$1,159,867,486	\$482,870,319	2,745,059
1937 <sup>3</sup> .....	841	137,803	175,650,203	721,101,076	1,205,131,721	484,030,645	( <sup>4</sup> )
1935.....	779	126,971	133,601,520	525,498,880	879,001,560	353,502,680	( <sup>5</sup> )
1933.....	781	107,298	99,194,024	393,663,024	695,654,391	301,991,367	( <sup>6</sup> )
1931.....	848	107,902	126,885,792	495,088,615	861,530,240	356,441,625	( <sup>6</sup> )
1929.....	883	128,049	173,077,781	723,360,707	1,206,114,305	482,753,598	2,168,012
1927.....	764	123,360	162,002,097	615,556,264	1,029,534,967	413,978,703	1,973,563
1925.....	763	123,842	160,145,932	605,890,286	971,882,320	366,022,034	1,948,871
1923.....	746	120,677	151,476,693	573,727,153	907,346,992	333,619,839	1,791,569
1921.....	738	105,294	127,028,767	445,992,351	667,435,847	221,443,496	( <sup>6</sup> )
1919.....	729	113,759	135,690,642	467,482,637	788,059,377	320,576,740	1,613,037
1914.....	718	88,457	53,245,639	213,181,286	332,147,175	118,965,889	1,484,255
1909.....	777	75,978	40,804,502	165,442,341	267,656,964	102,214,623	1,264,185
1904.....	761	65,964	32,019,212	111,251,478	188,715,139	77,463,711	1,090,757
1899.....	763	49,646	20,746,426	70,530,236	127,326,162	56,795,926	761,858
PULP MILLS:							
1939.....	194	26,870	33,087,514	144,736,646	226,851,822	82,115,176	( <sup>6</sup> )
1937 <sup>3</sup> .....	194	26,994	33,570,346	153,651,946	247,191,957	93,540,011	( <sup>4</sup> )
PAPER AND PAPERBOARD MILLS:							
1939.....	638	110,575	142,600,328	532,260,521	933,015,694	400,755,143	( <sup>6</sup> )
1937 <sup>3</sup> .....	647	110,809	142,079,857	567,449,130	967,939,764	390,490,634	( <sup>4</sup> )
CONVERTED PAPER PRODUCTS:							
1939.....	2,433	126,570	133,350,038	471,146,481	855,874,338	384,727,857	45,771
1937 <sup>3</sup> .....	2,233	123,322	133,613,242	490,983,296	867,251,726	376,268,430	( <sup>4</sup> )
Coated and glazed paper:							
1939.....	140	7,450	9,394,260	53,627,595	84,386,593	30,758,995	9,097
1937 <sup>3</sup> .....	103	7,240	8,614,339	51,950,312	78,522,258	26,571,946	( <sup>4</sup> )
Envelopes:							
1939.....	169	8,689	9,596,844	24,623,014	50,118,134	25,495,120	3,139
1937 <sup>3</sup> .....	162	9,511	10,502,815	25,106,584	51,289,922	26,183,359	( <sup>4</sup> )
Paper bags, except those made in paper mills:							
1939.....	119	11,081	10,628,601	53,964,442	85,776,374	31,811,932	2,837
1937 <sup>3</sup> .....	107	10,360	9,849,896	53,423,931	82,458,263	29,034,332	( <sup>4</sup> )
Fiber cans, tubes, and similar products:							
1939.....	116	6,637	6,962,529	13,052,397	33,345,334	19,392,937	6,508
1937 <sup>3</sup> .....	100	6,104	6,347,064	14,038,679	32,791,570	18,702,891	( <sup>4</sup> )
Paperboard containers and boxes not elsewhere classified:							
1939.....	1,338	62,530	63,806,013	213,838,608	382,709,595	168,870,987	8,354
1937 <sup>3</sup> .....	1,226	62,620	63,300,758	231,410,226	394,780,932	163,376,706	( <sup>4</sup> )
Die-cut paper and paperboard, and converted cardboard:							
1939.....	121	4,354	5,453,990	16,060,422	33,263,907	17,194,485	2,840
1937 <sup>3</sup> .....	115	5,046	6,063,598	15,519,540	34,043,743	18,524,203	( <sup>4</sup> )
Wallpaper:							
1939.....	46	4,054	5,333,246	11,695,922	24,968,843	13,272,921	4,157
1937 <sup>3</sup> .....	42	4,543	5,455,289	11,919,748	26,771,995	14,852,247	( <sup>4</sup> )
Converted paper products not elsewhere classified:							
1939.....	384	21,775	22,184,555	83,375,031	161,305,558	77,930,477	8,839
1937 <sup>3</sup> .....	378	22,898	23,479,483	87,594,276	166,587,043	79,022,767	( <sup>4</sup> )
PULP GOODS (PRESSED, MOLDED):							
1939.....	14	701	818,690	1,522,772	3,826,393	2,303,621	2,070
1937 <sup>3</sup> .....	10	819	873,095	1,474,564	4,041,554	2,566,990	( <sup>4</sup> )

<sup>1</sup> Figures for years prior to 1935 do not include cost of contract work.

<sup>2</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>3</sup> Figures for 1937 have been revised for comparability with 1939 because of changes in classification, but no revision was made for prior years.

<sup>4</sup> Not called for on schedule.

<sup>5</sup> Data not available.

<sup>6</sup> Because of the fact that in many cases a paper mill and a pulp mill are supplied with power from the same power plant, it is impossible to give separate figures for each industry.

## CENSUS OF MANUFACTURES: 1939

GENERAL STATISTICS IN DETAIL, FOR THE GROUP AND BY INDUSTRIES: 1939<sup>1</sup>

ITEM	Total for the group	711	720	CONVERTED PAPER PRODUCTS								794
				740	751	760	774	779	791	793	799	
Number of establishments.....	3, 279	194	638	140	169	119	116	1, 338	121	46	384	14
Proprietors and firm members....	839	2	19	17	41	19	40	497	47	7	146	4
Persons reported by manufacturing industries, total.....	316, 121	30, 613	129, 217	9, 549	11, 161	12, 703	7, 790	75, 376	5, 670	4, 885	23, 301	856
Salaried officers of corporations.....	4, 225	65	871	201	257	140	109	1, 763	181	81	539	18
Manufacturing:												
Salaried employees.....	26, 840	2, 314	11, 447	1, 040	826	896	655	5, 845	534	417	2, 791	75
Wage earners (average for the year).....	264, 716	26, 870	110, 575	7, 450	8, 689	11, 081	6, 637	62, 530	4, 354	4, 054	21, 775	701
Distribution.....	14, 808	36	3, 047	766	1, 289	509	372	4, 852	568	324	2, 983	62
Construction.....	4, 933	1, 120	3, 037	84	75	67	8	326	19	9	188	
Other.....	599	208	240	8	25	10	9	60	14		25	
Salaries and wages, total.....	\$434, 797, 264	\$40, 866, 247	\$188, 316, 938	\$14, 898, 515	\$15, 826, 508	\$14, 933, 981	\$9, 657, 697	\$95, 873, 427	\$8, 860, 835	\$7, 654, 705	\$36, 827, 482	\$1, 080, 920
Salaried officers.....	29, 768, 469	635, 481	7, 611, 171	1, 609, 555	1, 621, 032	1, 332, 305	547, 706	10, 841, 974	1, 110, 723	578, 853	3, 793, 138	86, 531
Manufacturing:												
Salaries.....	55, 107, 927	5, 243, 830	25, 369, 431	2, 091, 888	1, 777, 199	1, 673, 734	1, 272, 200	10, 749, 106	1, 032, 786	887, 020	4, 907, 239	103, 494
Wages.....	309, 856, 579	33, 087, 514	142, 600, 328	9, 384, 260	9, 596, 844	10, 628, 601	6, 962, 529	63, 806, 013	5, 453, 990	5, 333, 246	22, 184, 555	818, 090
Distribution.....	31, 989, 743	134, 664	7, 898, 343	1, 684, 387	2, 652, 170	1, 154, 183	849, 550	9, 930, 874	1, 203, 263	898, 561	5, 571, 543	72, 205
Construction.....	6, 865, 547	1, 258, 747	4, 403, 301	110, 019	150, 088	129, 908	16, 157	434, 830	27, 024	17, 025	318, 448	
Other.....	1, 208, 999	506, 011	434, 364	18, 406	29, 175	15, 250	9, 555	110, 630	33, 049		52, 559	
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	1, 149, 666, 420	144, 736, 646	532, 260, 521	53, 627, 595	24, 623, 014	53, 964, 442	13, 952, 397	213, 838, 608	16, 069, 422	11, 695, 922	83, 375, 081	1, 522, 772
Materials, supplies, and containers.....	1, 063, 398, 911	127, 768, 914	473, 236, 078	52, 313, 862	23, 966, 746	53, 171, 074	13, 210, 251	209, 725, 722	15, 684, 323	11, 265, 164	81, 830, 783	1, 225, 994
Fuel.....	58, 749, 342	11, 402, 602	43, 506, 787	526, 662	145, 235	136, 331	464, 672	1, 511, 853	127, 709	246, 580	504, 756	110, 158
Purchased electric energy.....	25, 773, 110	5, 518, 728	15, 387, 272	610, 662	339, 427	346, 743	247, 613	2, 013, 602	173, 898	151, 796	799, 749	180, 620
Contract work.....	1, 745, 057	46, 402	130, 384	176, 409	171, 606	310, 294	29, 801	587, 431	83, 495	29, 382	179, 793	
Value of products.....	2, 019, 568, 217	226, 851, 822	933, 015, 664	84, 386, 593	50, 118, 134	85, 776, 374	33, 345, 334	382, 709, 595	33, 263, 907	24, 968, 843	161, 305, 558	3, 826, 393
Value added by manufacture.....	869, 901, 797	82, 115, 176	400, 755, 143	30, 758, 998	25, 495, 120	31, 811, 932	19, 392, 937	168, 870, 987	17, 194, 485	13, 272, 921	77, 930, 477	2, 303, 621

<sup>1</sup> The number at the head of each column represents the following industries: 711, Pulp mills; 720, Paper and paperboard mills; 740, Coated and glazed paper; 751, Envelopes; 760, Paper bags, except those made in paper mills; 774, Fiber cans, tubes, and similar products; 779, Paperboard containers and boxes not elsewhere classified; 791, Die-cut paper and paperboard, and converted cardboard; 793, Wallpaper; 799, Converted paper products not elsewhere classified; 794, Pulp goods (pressed, molded).

# PULP MILLS

[A preliminary report for this industry was issued October 24, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments engaged primarily in the manufacture of pulp from wood and other fibers, such as rags, cotton linters, straw, etc.

**Annual pulpwood-consumption and wood-pulp-production statistics.**—In addition to the biennial census statistics, tables 5, 6, 7, and 9 give figures based on data collected in the special canvass covering pulpwood consumption and wood-pulp production in the year 1938.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1927 TO 1939

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work <sup>3</sup>	Value of products	Value added by manufacture <sup>4</sup>	Horsepower of prime movers <sup>5</sup>
1939	194	26,870	\$33,087,514	\$144,736,646	\$226,851,822	\$82,115,176	(4)
1937	194	26,994	33,570,346	153,651,946	247,191,957	93,540,011	
1935	188	23,627	23,401,212	96,178,418	167,208,261	71,029,843	
1933	181	20,074	18,103,342	81,896,058	134,691,766	52,795,708	
1931	198	20,219	22,843,982	110,668,220	166,559,043	55,890,823	
1929	198	24,729	32,679,407	148,752,729	238,928,279	90,175,550	
1927 <sup>6</sup>	219	24,794	31,527,358	151,325,425	218,198,201	66,872,776	

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Figures for years prior to 1935 do not include cost of contract work.

<sup>4</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>5</sup> Because of the fact that in many cases a paper mill and a pulp mill under common ownership are supplied with power from the same power plant, it is impossible to give separate figures for each industry. For horsepower of prime movers see combined figures, table 1 of the report for "Paper and paperboard mills," p. 641.

<sup>6</sup> Prior to the year 1927, "Paper and wood pulp" was reported as a single industry classification.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	Florida	Louisiana	Maine	Michigan	Minnesota	New York	North Carolina
Number of establishments <sup>1</sup>	194	5	7	21	10	7	35	4
Proprietors and firm members	2						1	
Persons reported by manufacturing establishments, total <sup>2</sup>	30,613	1,463	1,959	3,335	993	1,068	1,827	1,406
Salaried officers of corporations <sup>2</sup>	65		7	5	6	1	9	5
Manufacturing:								
Salaried employees <sup>2</sup>	2,314	109	157	228	44	71	131	127
Wage earners (average for the year) <sup>3</sup>	26,870	1,144	1,787	3,048	904	934	1,678	1,077
Distribution	36		8				1	7
Construction	1,120	206		54	29	12	8	155
Other	208	4			10			35
Salaries and wages, total <sup>2</sup>	\$40,866,247	\$1,534,882	\$2,475,607	\$4,369,825	\$1,197,674	\$1,303,779	\$2,178,065	\$2,052,845
Salaried officers <sup>2</sup>	635,481		94,760	34,612	25,932	12,540	37,016	89,600
Manufacturing:								
Salaries <sup>2</sup>	5,243,830	175,836	273,563	567,230	96,322	172,874	264,312	270,434
Wages	33,087,514	1,271,007	2,072,656	3,701,009	1,028,233	1,110,828	1,802,863	1,402,723
Distribution	134,664		34,628				5,000	10,855
Construction	1,258,747	81,761		66,974	29,263	8,037	9,374	222,358
Other	506,011	6,278			17,924			56,875
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total	144,736,646	5,152,352	8,549,034	18,490,831	4,792,732	2,953,303	15,011,264	3,473,619
Materials, supplies, and containers	127,768,914	4,601,655	7,850,514	15,991,970	4,201,372	2,283,594	13,354,720	2,997,844
Fuel	11,402,602	530,202	522,161	1,149,745	331,649	596,738	858,036	322,949
Purchased electric energy	5,518,728	20,495	176,359	1,349,116	123,309	102,971	798,508	152,826
Contract work	46,402				46,402			
Value of products	226,851,822	9,145,526	13,816,560	25,370,932	7,085,796	5,816,142	18,982,363	7,099,931
Value added by manufacture <sup>4</sup>	82,115,176	3,993,174	5,267,526	6,880,101	2,293,064	2,862,839	3,971,099	3,626,312

See footnotes at end of table.



## CENSUS OF MANUFACTURES: 1939

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939—Continued

ITEM	Oregon	Pennsylvania	Tennessee	Vermont	Virginia	Washington	Wisconsin	Other States <sup>1</sup>
Number of establishments <sup>1</sup> .....	7	9	6	3	9	19	28	24
Proprietors and firm members.....								1
Persons reported by manufacturing establishments, total <sup>2</sup> .....	1,045	1,460	855	73	2,145	4,481	3,121	5,373
Salaried officers of corporations <sup>2</sup> .....	2	4	6		5	8	5	2
Manufacturing:								
Salaried employees <sup>2</sup> .....	67	81	78	5	148	506	238	324
Wage earners (average for the year) <sup>3</sup> .....	934	1,271	747	68	1,888	3,850	2,838	4,652
Distribution.....		1				15	3	1
Construction.....	37	42	24		94	34	37	388
Other.....	5	70			10	68		6
Salaries and wages, total <sup>2</sup> .....	\$1,380,023	\$2,153,792	\$1,085,789	\$76,088	\$2,719,697	\$7,701,623	\$4,804,184	\$6,332,374
Salaried officers <sup>2</sup> .....	10,098	77,840	62,052		75,500	62,779	39,268	13,484
Manufacturing:								
Salaries <sup>2</sup> .....	143,282	177,175	191,951	7,300	316,113	1,323,035	542,609	722,294
Wages.....	1,147,156	1,571,422	806,974	68,788	2,124,283	5,956,883	3,642,634	5,320,555
Distribution.....		2,830				68,447	11,205	1,699
Construction.....	71,921	114,198	24,812		187,897	111,391	66,668	264,093
Other.....	7,566	210,327			15,904	179,088	1,800	10,249
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	3,613,261	6,799,847	4,107,606	189,976	9,935,603	20,219,364	18,030,499	23,417,355
Materials, supplies, and containers.....	3,084,595	5,970,078	3,684,384	181,981	8,787,822	18,179,766	16,087,516	20,421,103
Fuel.....	217,951	726,823	300,123	2,404	1,111,490	1,175,454	1,284,052	2,302,825
Purchased electric energy.....	310,715	102,946	123,099	5,591	36,291	804,144	658,931	603,427
Contract work.....								
Value of products.....	6,344,087	9,436,299	7,257,350	307,802	17,072,846	37,288,183	27,457,953	34,370,052
Value added by manufacture <sup>4</sup> .....	2,730,826	2,636,452	3,149,744	117,826	7,137,243	17,068,819	9,427,454	10,952,607

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment. The 194 mills reporting for 1939 include 8 that manufactured pulp from materials other than wood.<sup>2</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.<sup>3</sup> See GENERAL EXPLANATIONS—Wage earners and wages.<sup>4</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.<sup>5</sup> Alabama, 3 establishments; Arkansas, 2; California, 1; Georgia, 2; Maryland, 1; Massachusetts, 2; Mississippi, 2; Missouri, 1; New Hampshire, 4; Ohio, 2; South Carolina, 3; Texas, 1.

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939, 1937, AND 1929

	1939	1937	1929
Pulp Mills industry, all products, total value.....	\$226,851,822	\$247,191,957	\$238,928,279
Pulp made in this industry.....	222,812,085	242,443,451	234,759,420
Miscellaneous products not classifiable.....	<sup>1</sup> 3,277,284	4,182,658	4,168,859
Other products (not classified in this industry).....	<sup>2</sup> 762,453	565,848	
Pulp (wood and other fiber), aggregate value.....	222,812,085	242,443,451	234,759,420
Wood pulp.....	209,061,107	225,573,125	223,178,096
Other pulp <sup>3</sup> .....	13,750,978	16,870,326	11,581,324

<sup>1</sup> Principally value of pulp purchased in unbleached condition and later bleached.<sup>2</sup> Principally value of chemicals.<sup>3</sup> Principally pulp made from cottonseed-pulp fiber, cotton linters, rags, reclaimed paper, and straw.

## PULP MILLS

637

TABLE 4.—PULP PRODUCTION, BY PROCESS, FOR CONSUMPTION AND FOR SALE, BY QUANTITY AND VALUE, FOR THE UNITED STATES: 1939, 1937, AND 1929

PROCESS	1939		1937		1929	
	Quantity (tons, 2,000 pounds)	Value (f. o. b. mill)	Quantity (tons, 2,000 pounds)	Value (f. o. b. mill)	Quantity (tons, 2,000 pounds)	Value (f. o. b. mill)
Pulp (wood and other fiber), aggregate.....	7,153,478	\$222,812,085	6,713,576	\$242,443,451	4,937,235	\$234,759,420
For consumption <sup>1</sup> .....	5,754,388	157,002,553	5,331,513	160,029,874	4,167,189	183,255,593
For sale.....	1,399,090	65,209,532	1,382,063	82,413,577	770,046	51,503,827
Wood pulp, total.....	6,993,334	209,061,107	6,572,918	225,573,125	4,862,885	223,178,096
For consumption <sup>1</sup> .....	5,692,460	154,501,936	5,276,082	157,046,862	4,121,955	177,091,587
For sale.....	1,300,874	54,559,171	1,296,836	68,526,263	740,930	46,086,509
Mechanical, not steamed, total.....	1,342,643	25,379,398	1,513,047	28,281,135	1,474,415	40,617,139
For consumption <sup>1</sup> .....	1,327,561	25,015,280	1,481,804	27,493,472	1,447,135	39,763,417
For sale.....	15,082	364,118	31,243	787,663	27,280	853,722
Mechanical, steamed, total.....	102,232	2,330,772	87,620	2,034,116	163,238	6,605,759
For consumption <sup>1</sup> .....	86,192	1,832,887	(2)	(2)	{ 158,014	{ 6,446,183
For sale.....	16,040	497,905				
Sulphite fiber, unbleached, total.....	729,203	24,736,494	791,575	30,718,426	841,558	40,812,205
For consumption <sup>1</sup> .....	489,645	16,970,281	546,995	20,567,545	678,794	32,979,824
For sale.....	239,558	7,766,213	244,580	10,150,881	162,764	7,832,381
Sulphite fiber, bleached, total <sup>3</sup> .....	1,217,249	61,807,367	1,348,669	79,201,689	839,953	62,152,903
For consumption <sup>1</sup> .....	672,345	32,067,649	657,367	35,385,100	549,685	37,719,011
For sale.....	544,904	29,239,718	691,302	43,816,589	290,268	24,433,892
Sulphate fiber, unbleached, total.....	2,538,204	55,242,263	1,923,937	51,096,623	{ 918,084	{ 37,173,860
For consumption <sup>1</sup> .....	2,291,664	48,634,135	1,776,832	45,700,216		
For sale.....	246,540	6,608,128	147,105	5,396,407		
Sulphate fiber, bleached, total.....	424,453	17,697,206	215,150	8,341,113		
For consumption <sup>1</sup> .....	285,188	11,828,213	(2)	(2)	{ 520,729	{ 34,064,784
For sale.....	139,265	5,868,993				
Soda fiber, bleached, total.....	441,565	19,710,156	507,548	23,465,719		
For consumption <sup>1</sup> .....	358,482	15,954,500	382,619	17,194,856	397,731	26,156,655
For sale.....	83,083	3,755,656	124,929	6,270,863	122,998	7,908,129
Semichemical and other wood pulp, for consumption, <sup>4</sup> and for sale..	151,658	2,105,267	132,621	1,748,316	40,481	797,645
Screenings, mechanical and chemical, total <sup>5</sup> .....	46,127	552,184	52,851	685,988	64,427	953,801
For consumption <sup>1</sup> .....	31,351	351,797	(2)	(2)	{ 48,234	{ 665,042
For sale.....	14,776	200,387				
Other pulp, total <sup>6</sup> .....	160,144	13,750,978	140,658	16,870,326	74,350	11,581,324
For consumption <sup>1</sup> .....	61,928	3,100,617	55,431	2,983,012	45,234	6,164,006
For sale.....	98,216	10,650,361	85,227	13,887,314	29,116	5,417,318

<sup>1</sup> Figures for "consumption" refer to wood pulp made and consumed in the same plants or transferred to and consumed in other plants operated by the same companies.<sup>2</sup> Withheld to avoid disclosing figures reported by individual establishments.<sup>3</sup> Sulphite fiber, bleached:

KIND	1939		1937		1929	
	Tons	Value	Tons	Value	Tons	Value
Superpurified, rayon, and special chemical grades*.....	193,420	\$12,567,963	353,640	\$23,871,039	{ 839,953	{ \$62,152,903
Other bleached.....	1,023,829	48,739,404	995,029	55,330,650		

\*Combined for 1939 and 1937 to avoid disclosing figures reported by individual establishments.

<sup>4</sup> Not reported separately.<sup>5</sup> Unbleached and bleached.<sup>6</sup> Combined to avoid disclosing figures reported by individual establishments for 1939. For 1937: Mechanical, 9,674 tons, valued at \$69,667; chemical, 43,177 tons, valued at \$616,321. 1929: Mechanical, 11,459 tons, valued at \$144,718; chemical, 52,968 tons, valued at \$809,083.<sup>7</sup> Chemical only.<sup>8</sup> Principally pulp made from cottonseed-hull fiber, cotton linters, rags, reclaimed paper, and straw.

## CENSUS OF MANUFACTURES: 1939

TABLE 5.—PULPWOOD CONSUMPTION AND WOOD-PULP PRODUCTION—QUANTITY, BY PROCESS OF MANUFACTURE, FOR THE UNITED STATES: 1939, 1938, 1937, AND 1929

	1939		1938		1937		1929	
	Pulpwood consumption	Wood-pulp production	Pulpwood consumption	Wood-pulp production	Pulpwood consumption	Wood-pulp production	Pulpwood consumption	Wood-pulp production
Total.....	<i>Cords</i> 10,816,466	<i>Short tons</i> 6,993,334	<i>Cords</i> 9,193,991	<i>Short tons</i> 5,933,560	<i>Cords</i> 10,393,800	<i>Short tons</i> 6,572,918	<i>Cords</i> 7,645,011	<i>Short tons</i> 4,862,885
Mechanical.....	1,315,727	1,444,875	1,219,306	1,333,308	1,479,502	1,600,667	1,559,788	1,637,653
Sulphite.....	3,689,420	1,946,452	3,090,046	1,606,476	4,318,029	2,140,244	3,420,646	1,681,511
Sulphate.....	4,859,020	2,962,657	4,025,540	2,443,051	3,561,781	2,139,087	1,701,359	918,084
Soda.....	764,309	441,555	718,172	395,307	892,804	507,548	925,371	520,729
Semichemical and other wood pulp.....	187,990	151,658	140,927	118,544	141,684	132,521	37,847	40,481
Screenings, mechanical and chemical <sup>1</sup> .....	.....	46,127	.....	36,874	.....	52,851	.....	64,427

<sup>1</sup> Combined to avoid disclosing figures reported by individual establishments for 1939. For 1938, mechanical, 4,215 tons; chemical, 32,659 tons. For 1937, mechanical, 9,674 tons; chemical, 43,177 tons. For 1929, mechanical, 11,459 tons; chemical, 52,968 tons.

TABLE 6.—WOOD-PULP PRODUCTION—AVERAGE VALUE PER TON, FOR THE UNITED STATES: 1939, 1938, 1937, AND 1929

	1939	1938	1937	1929
Mechanical:				
Not steamed.....	\$18.90	\$18.40	\$18.69	\$27.55
Steamed.....	22.80	17.95	23.22	40.40
Sulphite:				
Unbleached.....	33.92	35.40	38.81	48.49
Bleached, total.....	50.37	56.51	58.73	73.99
Superpurified, rayon, and special chemical grades.....	64.98	80.41	67.50	( <sup>2</sup> )
Other bleached.....	47.61	49.49	55.61	( <sup>2</sup> )
Sulphate:				
Unbleached.....	21.76	21.45	26.56	40.49
Bleached.....	41.69	37.91	38.77	
Soda, bleached.....	44.64	45.69	46.23	\$ 65.41
Semichemical and other wood pulp.....	13.88	14.15	13.19	\$ 19.70

<sup>1</sup> Superpurified, \$73.20; rayon and special chemical grades, \$84.09.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> "Unbleached" and "bleached."

<sup>4</sup> Semichemical only.

TABLE 7.—PULPWOOD CONSUMPTION, BY QUANTITY AND COST, AND BY KIND OF WOOD, FOR THE UNITED STATES: 1939, 1938, 1937, AND 1929

KIND OF WOOD	1939		1938		1937		1929	
	Cords	Cost	Cords	Cost	Cords	Cost	Cords	Cost
Total.....	10,816,466	\$84,538,835	9,193,991	\$74,433,181	10,393,800	\$82,884,799	7,645,011	\$100,054,130
Yellow pine, Southern.....	3,834,644	20,126,230	3,261,404	17,570,346	2,658,949	14,498,259	1,036,272	(3)
Spruce:								
Domestic.....	1,567,643	18,419,481	1,447,457	17,249,767	2,010,720	21,980,698	2,074,267	
Imported.....	906,806	12,575,102	832,295	11,822,410	826,528	10,743,365	1,029,913	
Hemlock, domestic and imported.....	2,218,678	15,147,529	1,714,424	11,337,307	2,302,012	16,029,747	1,324,549	
Jack pine, domestic and imported.....	1,359,755	1,355,291	1,268,570	1,246,539	300,786	2,863,084	1,195,577	
Poplar:								
Domestic.....	354,125	3,179,101	324,808	2,947,023	441,401	3,899,639	329,466	
Imported.....	123,148	1,401,648	95,758	1,111,224	90,365	960,930	157,829	
Balsam fir:								
Domestic.....	283,506	2,891,304	321,084	3,446,131	320,715	3,269,690	317,552	
Imported.....	74,705	891,287	65,392	731,128	71,447	767,243	45,412	
Beech, birch, and maple, domestic and imported.....	1,241,039	2,318,285	168,796	1,667,233	2,257,410	2,302,036	2,76,950	
White fir, domestic.....	159,428	953,343	98,878	608,238	135,384	769,446	111,054	
Cottonwood.....	64,330	428,119	40,996	257,069	64,035	432,366	(3)	
Red gum.....	47,370	294,009	47,967	324,086	25,967	165,750	39,685	
Tamarack (larch).....	8,450	64,620	9,937	80,735	8,945	84,057	51,835	
Other woods <sup>1</sup> .....	253,825	1,732,098	274,105	2,006,656	313,745	2,115,411	293,365	
Slabs and mill waste.....	319,014	701,388	231,160	813,289	565,391	2,003,078	561,285	

<sup>1</sup> Combined to avoid disclosing figures reported by individual establishments.

<sup>2</sup> Domestic only.

<sup>3</sup> Data not available.

<sup>4</sup> Domestic and imported.

<sup>5</sup> "Cottonwood" included with "Other woods."

<sup>6</sup> Reported as "Gum."

<sup>7</sup> For 1939, domestic chestnut, Douglas fir, yellow poplar, oak, black gum, red fir, and ash, and domestic and imported miscellaneous hard woods not reported separately. For earlier years, see published reports.

TABLE 8.—PULPWOOD CONSUMPTION, BY QUANTITY AND COST, BY KIND OF WOOD, AND BY CONDITION IN WHICH PURCHASED, FOR THE UNITED STATES: 1939

KIND OF WOOD	TOTAL		ROUGH		PEELED AND ROSSED	
	Cords	Cost	Cords	Cost	Cords	Cost
Total.....	10,816,406	\$84,538,835	6,208,462	\$38,376,204	4,608,004	\$46,162,571
Yellow pine, Southern Spruce:	3,834,644	20,126,230	3,432,220	17,127,519	402,424	2,998,711
Domestic.....	1,567,643	18,419,481	562,149	6,101,313	1,005,494	12,318,168
Imported.....	900,806	12,575,102	196,638	2,447,151	710,168	10,127,951
Hemlock, domestic and imported.....	2,218,678	15,147,529	1,289,776	8,176,121	928,902	6,971,408
Jack pine, domestic and imported.....	2,359,755	3,355,201	144,894	1,243,153	214,861	2,112,138
Balsam:						
Domestic.....	283,506	2,891,304				
Imported.....	74,705	891,287	107,415	913,021	250,796	2,809,570
White fir, domestic.....	159,428	953,343	106,278	652,734	53,150	300,609
Red gum.....	47,370	294,009	30,856	149,059	16,514	144,950
Poplar:						
Domestic.....	354,125	3,179,101				
Imported.....	123,148	1,461,648				
Beech, birch, and maple, domestic and imported.....	2,241,039	2,318,285	144,970	1,205,311	890,947	7,978,560
Cottonwood.....	64,330	428,119				
Tamarack (larch).....	8,450	64,620				
Other woods <sup>1</sup> .....	253,825	1,732,098				
Slabs and mill waste.....	319,014	701,388	193,206	360,882	125,748	340,506

<sup>1</sup> Peeled only.<sup>2</sup> See table 7, footnote 1.<sup>3</sup> See table 7, footnote 7.

TABLE 9.—PULPWOOD CONSUMPTION, BY QUANTITY AND COST, FOR THE UNITED STATES: 1939, 1938, 1937, AND 1929

YEAR	Number of cords	Cost (f. o. b. mill)	Average per cord
1939.....	10,816,406	\$84,538,835	\$7.82
1938.....	9,193,091	74,433,181	8.10
1937.....	10,393,800	82,884,799	7.97
1929.....	7,645,011	100,054,139	13.09

TABLE 10.—PULPWOOD CONSUMPTION, BY QUANTITY AND COST, AND WOOD-PULP PRODUCTION, BY QUANTITY AND VALUE, BY STATES: 1939

STATE	WOOD CONSUMED		PULP PRODUCED	
	Cords	Cost	Short tons	Value
United States.....	10,816,466	\$84,538,835	6,993,334	\$209,061,107
Northeastern and Central States, <sup>1</sup> total.....	2,601,285	30,050,440	1,907,832	63,721,123
Maine.....	1,171,677	12,717,826	941,273	25,268,467
New York.....	508,000	7,906,850	400,652	14,946,996
Pennsylvania.....	323,026	4,382,432	193,958	9,287,446
Other Northeastern and Central States <sup>2</sup> .....	538,522	5,043,341	311,949	14,218,214

TABLE 10.—PULPWOOD CONSUMPTION, BY QUANTITY AND COST, AND WOOD-PULP PRODUCTION, BY QUANTITY AND VALUE, BY STATES: 1939—Continued

STATE	WOOD CONSUMED		PULP PRODUCED	
	Cords	Cost	Short tons	Value
Lake States, total.....	1,658,929	\$17,490,192	1,016,806	\$39,255,912
Michigan.....	308,124	3,069,510	200,325	6,817,796
Minnesota.....	244,657	2,299,023	160,665	5,409,170
Wisconsin.....	1,106,148	12,121,659	655,816	27,028,946
Southern States, <sup>3</sup> total.....	4,220,537	22,343,628	2,654,535	62,517,036
Florida.....	689,627	3,768,994	449,162	9,145,526
Louisiana.....	930,071	4,477,437	589,672	13,730,082
North Carolina.....	340,921	2,024,989	179,636	7,045,509
Virginia.....	646,417	3,748,071	402,929	11,336,858
Other Southern States <sup>4</sup> .....	1,613,501	8,324,137	1,033,136	21,259,061
North Pacific States, total.....	2,335,715	14,654,566	1,414,161	43,567,036
Oregon.....	407,969	2,656,654	288,047	6,344,087
Washington.....	1,927,746	11,997,912	1,126,114	37,222,949

<sup>1</sup> Including Tennessee.<sup>2</sup> Maryland, Massachusetts, New Hampshire, Ohio, Tennessee, Vermont.<sup>3</sup> Not including Tennessee.<sup>4</sup> Alabama, Arkansas, Georgia, Mississippi, South Carolina, Texas.

TABLE 11.—EQUIPMENT, BY KIND, NUMBER, AND CAPACITY, FOR THE UNITED STATES: 1939, 1937, AND 1929

KIND	Number	SHORT TONS	
		Total rated capacity per 24 hours	Total rated yearly capacity, basis 310 days
Grinders for mechanical wood pulp:			
1939.....	974	6,848	2,122,880
1937.....	809	6,973	2,161,630
1929.....	1,161	7,587	2,351,970
Digestors:			
Soda fiber:			
1939.....	145	1,814	562,340
1937.....	156	1,830	567,300
1929.....	198	2,037	631,470
Sulphite fiber:			
1939.....	359	8,145	2,524,950
1937.....	356	7,558	2,342,980
1929.....	385	6,357	1,970,670
Sulphate fiber:			
1939.....	268	10,866	3,368,460
1937.....	223	7,852	2,434,120
1929.....	113	2,740	849,400
Semichemical:			
1939.....	33	499	154,690
1937.....	85	983	304,730
1929.....	40	477	147,870
Other:			
1939.....	47	860	266,600
1937.....	(2)	(2)	(2)
1929.....	(2)	(2)	(2)

<sup>1</sup> Includes digestors for "Pulp, other than wood."<sup>2</sup> Not reported separately, included with "Semichemical."

## CENSUS OF MANUFACTURES: 1939

TABLE 12.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939, 1937, AND 1929, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939	26,870	27,098	26,388	26,009	25,788	26,120	26,068	25,483	26,452	27,108	28,450	28,437	29,040
1937	26,994	25,084	25,697	26,271	26,917	26,988	27,569	28,241	28,422	28,157	27,746	27,184	25,640
1929	24,729	24,384	24,545	25,088	25,148	25,196	25,336	24,827	24,834	24,437	24,384	24,337	24,235
Alabama	502	512	518	508	509	497	494	501	493	491	490	502	506
Florida	1,144	1,179	1,137	1,139	1,101	1,129	1,133	1,133	1,134	1,095	1,092	1,090	1,362
Louisiana	1,787	1,959	1,497	1,537	1,492	1,645	1,616	1,606	1,646	1,948	2,176	2,185	2,172
Maine	3,048	3,027	3,027	3,045	3,020	3,006	2,935	2,918	2,975	2,998	3,221	3,205	3,205
Michigan	904	883	860	889	981	929	905	902	901	903	903	924	873
Minnesota	984	963	996	990	983	980	967	974	935	1,001	1,026	1,015	984
New Hampshire	1,136	1,291	1,288	1,023	944	983	1,015	531	1,260	1,296	1,317	1,336	1,344
New York	1,678	1,750	1,577	1,595	1,636	1,556	1,691	1,661	1,649	1,669	1,753	1,776	1,823
North Carolina	1,077	1,112	1,124	1,098	1,077	917	889	1,000	1,127	1,119	1,145	1,166	1,155
Oregon	934	1,009	978	877	989	988	897	783	837	866	934	950	1,095
Pennsylvania	1,271	1,216	1,221	1,222	1,227	1,250	1,357	1,320	1,298	1,322	1,343	1,233	1,244
South Carolina	573	578	573	577	575	569	571	566	568	564	570	582	585
Tennessee	747	702	721	709	716	724	702	705	714	748	836	814	870
Vermont	68	51	60	67	74	89	70	43	38	60	99	94	77
Virginia	1,888	1,785	1,774	1,816	1,756	1,770	1,785	1,869	1,878	1,881	2,078	2,119	2,144
Washington	3,850	3,834	3,709	3,581	3,430	3,798	3,820	3,739	3,816	3,886	4,110	4,169	4,311
Wisconsin	2,838	2,853	2,877	2,892	2,857	2,821	2,806	2,813	2,820	2,859	2,846	2,817	2,799

TABLE 13.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry	194
Reporting expenditures for plant and equipment	125
Value of products:	
Total for the industry	\$226,851,822
Reporting expenditures for plant and equipment	179,561,023
Expenditures for plant and equipment:	
Total for the industry	9,310,064
Expenditures for new construction or major alterations of buildings and other fixed plant and structures	2,159,408
Expenditures for new machinery and operating equipment	6,104,623
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land	257,130
Expenditures unclassified	788,903

TABLE 14.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total <sup>1</sup>	\$39,857,223	\$26,103,142
Finished products <sup>1</sup>	7,012,326	3,537,658
Materials, supplies, etc. <sup>1</sup>	32,844,897	22,565,484
End of year, total <sup>1</sup>	36,104,226	38,258,850
Finished products <sup>1</sup>	4,962,660	7,013,171
Materials, supplies, etc. <sup>1</sup>	31,141,536	31,245,679
Value of products for the industry, total	226,851,822	247,191,957
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand)	204,485,813	229,749,952
Value for establishments not reporting inventories <sup>2</sup>	22,366,009	17,442,005

<sup>1</sup> Not including data for 13 pulp mills, with combined products valued at \$14,037,144 in 1939, and 10 pulp mills, with combined products valued at \$14,596,394 in 1937, which were operated in conjunction with paper mills and which included the inventory figures for the pulp mills in their paper-mill reports.

<sup>2</sup> Includes \$14,037,144, the value of products reported by 13 pulp mills in 1939 and \$14,596,394, the value of products reported by 10 pulp mills in 1937, which did not report their inventories separately (see footnote 1).

TABLE 15.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929

See table 11 of the report for "Paper and paperboard mills," p. 648.

# PAPER AND PAPERBOARD MILLS

[A preliminary report for this industry was issued October 18, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of paper and paperboard. The principal material used is wood pulp, the greater part of which is manufactured in pulp mills operated in conjunction with paper mills. Small quantities of pulp made from rags, waste paper, straw, and other fibers of various kinds are also used. All kinds of paperboard, including wallboards, and insulating boards made strictly on paper machines, and converted paper products made in paper mills are classified in this industry. Establishments manufacturing wall and insulating board not made on paper machines are classified in the "Wallboard and wall plaster (except gypsum), building insulation (except mineral wool), and floor composition" industry. An independent fac-

tory making converted paper products is classified according to the value of its principal product.

**Paper-making machines.**—The distribution of machines by number as given in table 8 is based on the general or usual output of these machines, but in cases where one or more machines of the same type are used for producing two or more kinds of paper or board, the distribution by capacity has been made according to the several kinds of paper manufactured. To illustrate: If a mill operated two Fourdrinier machines and if 80 percent of this mill's output was newsprint and the remaining 20 percent was reported as "hanging paper," both machines were classified in the "number" column of the table as "newsprint," but 80 percent of their capacity was assigned to "newsprint" and 20 percent to "hanging paper."

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1927 TO 1939

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work <sup>3</sup>	Value of products	Value added by manufacture <sup>4</sup>	Horsepower of prime movers <sup>5</sup>
1939.....	638	110,575	\$142,600,328	\$532,260,521	\$933,015,664	\$400,755,143	<sup>6</sup> 2,745,059
1937.....	647	110,809	142,078,857	567,449,130	957,939,764	390,490,634	(9)
1935.....	591	103,344	110,200,308	429,320,462	711,793,290	282,472,837	(7)
1933.....	600	87,224	81,080,682	311,766,966	560,062,625	249,195,659	(9)
1931.....	650	87,683	104,041,810	384,420,395	684,971,167	300,550,802	(9)
1929.....	685	103,320	140,398,374	574,607,978	967,188,026	392,578,048	<sup>6</sup> 2,168,012
1927 <sup>8</sup> .....	710	98,566	130,474,739	572,785,538	919,891,465	347,105,927	<sup>6</sup> 1,973,563

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Figures for years prior to 1935 do not include cost of contract work.

<sup>4</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>5</sup> Covers power for the "Pulp mills" industry. Because of the fact that in many cases a paper mill and a pulp mill under a common ownership are supplied with power from the same power plant, it is impossible to give separate figures for each industry. The data shown for 1939 include the horsepower for 194 pulp mills; for 1929, include horsepower for 198 pulp mills; for 1927, include horsepower for 219 pulp mills.

<sup>6</sup> Not called for on schedule.

<sup>7</sup> Data not available.

<sup>8</sup> Prior to the year 1927, "Paper and wood pulp" was treated as a single industry classification.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	California	Connecticut	Delaware	Florida	Illinois	Indiana	Louisiana	Maine
Number of establishments <sup>1</sup> .....	638	12	27	6	3	22	16	8	23
Proprietors and firm members.....	19		2						
Persons reported by manufacturing establishments, total <sup>2</sup> .....	129,217	2,493	2,000	377	1,076	4,149	2,099	3,020	8,766
Salaried officers of corporations <sup>3</sup> .....	871	7	38	3	1	22	22	7	14
Manufacturing:									
Salaried employees <sup>4</sup> .....	11,447	271	145	24	90	345	179	295	726
Wage earners (average for the year) <sup>5</sup> .....	110,575	2,171	1,754	341	940	3,649	1,832	2,536	7,773
Distribution.....	3,047	30	44	2	8	128	46	33	38
Construction.....	3,037	14	19	7	34	3	20	149	215
Other.....	240				3	2			
Salaries and wages, total <sup>2</sup> .....	\$188,316,938	\$4,032,441	\$3,052,222	\$441,218	\$1,485,453	\$6,434,989	\$2,823,176	\$4,011,314	\$12,307,980
Salaried officers <sup>2</sup> .....	7,611,171	24,647	330,434	25,053	22,500	258,322	147,471	90,490	108,895
Manufacturing:									
Salaries <sup>2</sup> .....	25,369,431	647,297	349,978	60,369	196,555	809,999	413,555	539,769	1,731,440
Wages.....	142,600,328	3,261,801	2,232,572	335,129	1,188,856	5,019,872	2,091,702	3,092,772	10,168,937
Distribution.....	7,898,343	60,178	111,514	8,000	10,171	341,418	136,899	73,817	88,755
Construction.....	4,403,301	38,518	27,724	12,667	66,000	2,378	33,549	214,466	209,953
Other.....	434,364				3,371	3,000			
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	532,260,521	8,524,084	6,261,768	1,298,451	7,335,010	14,050,329	7,219,185	18,252,594	40,117,890
Materials, supplies, and containers.....	473,236,078	7,776,049	5,299,477	1,049,857	6,854,666	13,257,885	6,826,087	16,408,058	36,020,841
Fuel.....	43,505,787	457,864	765,998	134,494	462,612	1,306,236	681,767	979,716	3,470,415
Purchased electric energy.....	15,387,272	279,999	191,492	114,100	17,832	86,208	206,534	864,820	626,633
Contract work.....	130,384	10,172	4,801				4,797		
Value of products.....	933,015,664	17,501,256	12,062,927	2,355,354	14,125,130	29,001,836	13,100,711	25,650,456	69,278,265
Value added by manufacture <sup>4</sup> .....	400,755,143	8,977,172	5,801,159	1,056,903	6,790,120	14,351,507	5,881,526	7,397,862	29,160,375

See footnotes at end of table.

## CENSUS OF MANUFACTURES: 1939

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939—Continued

ITEM	Maryland	Massachusetts	Michigan	Minnesota	New Hampshire	New Jersey	New York	North Carolina	Ohio
Number of establishments <sup>1</sup> .....	9	71	49	9	22	35	110	7	45
Proprietors and firm members.....	4	1					8		
Persons reported by manufacturing establishments, total <sup>2</sup> .....	2,024	11,548	13,871	2,326	2,562	4,943	14,891	1,489	10,678
Salaried officers of corporations <sup>2</sup> .....	7	133	87	13	33	47	117	11	94
Manufacturing:									
Salaried employees <sup>2</sup> .....	143	959	868	219	195	349	1,435	165	1,127
Wage earners (average for the year) <sup>3</sup> .....	1,800	9,904	11,912	1,966	2,272	4,468	12,700	1,100	8,933
Distribution.....	18	205	321	103	17	54	362	16	297
Construction.....	56	249	364	25	45	25	272	161	216
Other.....		8	19				15	36	11
Salaries and wages, total <sup>2</sup> .....	\$2,314,279	\$16,231,920	\$20,049,874	\$3,827,829	\$3,430,541	\$8,035,575	\$21,212,161	\$1,985,190	\$16,418,359
Salaried officers <sup>2</sup> .....	43,821	1,011,308	773,884	158,775	236,409	505,011	801,473	120,895	856,040
Manufacturing:									
Salaries <sup>2</sup> .....	264,912	2,042,180	1,969,977	470,621	371,196	967,175	3,266,265	300,368	2,493,772
Wages.....	1,897,443	12,084,248	15,837,168	2,846,793	2,683,840	6,389,153	15,816,608	1,208,599	11,870,172
Distribution.....	30,901	653,290	888,766	332,037	72,493	168,656	847,391	46,176	755,360
Construction.....	77,202	431,476	551,848	19,603	66,603	25,580	465,958	251,818	427,268
Other.....		9,409	28,231				14,406	57,343	15,740
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	6,261,094	34,978,887	51,076,125	10,596,027	10,196,968	21,623,791	65,185,063	4,734,316	39,971,037
Materials, supplies, and containers.....	5,528,185	29,766,416	45,036,764	9,340,117	9,171,323	18,219,080	57,249,285	4,165,124	36,421,889
Fuel.....	538,810	3,586,049	5,523,771	1,105,697	769,672	2,474,227	4,846,323	452,125	3,042,750
Purchased electric energy.....	160,920	1,614,008	511,100	150,213	255,973	929,944	3,075,124	117,067	506,398
Contract work.....	33,179	11,126	4,490			540	14,331		
Value of products.....	10,080,525	65,058,084	89,112,533	18,518,252	16,293,358	39,927,897	108,329,371	9,627,226	67,492,845
Value added by manufacture <sup>4</sup> .....	3,819,431	30,079,197	38,036,408	7,922,225	6,096,390	18,304,106	43,144,308	4,892,910	27,521,808

  

ITEM	Oregon	Pennsylvania	Vermont	Virginia	Washington	West Virginia	Wisconsin	Other States <sup>5</sup>
Number of establishments <sup>1</sup> .....	6	47	8	11	13	5	44	30
Proprietors and firm members.....		3	1					
Persons reported by manufacturing establishments, total <sup>2</sup> .....	1,935	10,507	823	2,870	3,536	786	13,603	7,085
Salaried officers of corporations <sup>2</sup> .....	6	71	10	8	7	7	75	31
Manufacturing:								
Salaried employees <sup>2</sup> .....	150	1,063	48	256	241	62	1,425	667
Wage earners (average for the year) <sup>3</sup> .....	1,746	8,508	745	2,542	3,137	703	11,081	6,062
Distribution.....	5	511	18	15	21	14	587	74
Construction.....	23	254	2	43	130		490	251
Other.....	5	100		6			35	
Salaries and wages, total <sup>2</sup> .....	\$2,882,072	\$16,524,784	\$1,101,881	\$3,573,632	\$5,549,895	\$1,104,956	\$20,817,262	\$8,667,926
Salaried officers <sup>2</sup> .....	66,075	666,589	58,339	104,525	71,366	50,900	825,044	252,905
Manufacturing:								
Salaries <sup>2</sup> .....	308,226	2,349,577	107,566	549,564	664,525	154,087	3,042,653	1,297,305
Wages.....	2,454,455	11,473,813	888,826	2,831,640	4,539,148	838,099	14,776,351	6,794,271
Distribution.....	3,246	1,452,615	43,480	33,643	52,371	61,870	1,488,410	136,868
Construction.....	41,103	327,205	3,670	45,260	222,485		654,802	186,077
Other.....	8,967	254,895		9,000			30,002	
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	9,050,207	41,762,827	4,470,669	16,644,743	17,416,041	3,357,545	61,285,671	29,990,199
Materials, supplies, and containers.....	8,013,362	37,182,693	3,919,092	14,973,908	15,656,368	3,068,976	55,709,079	26,761,497
Fuel.....	604,347	3,601,373	855,886	1,061,618	918,781	230,667	4,045,884	2,089,204
Purchased electric energy.....	432,498	977,249	194,162	609,217	840,713	57,902	1,426,980	1,139,498
Contract work.....		1,512	1,529		179		43,725	
Value of products.....	15,695,747	81,103,067	7,282,053	26,750,880	33,961,138	5,157,466	101,302,409	54,246,898
Value added by manufacture <sup>4</sup> .....	6,645,540	39,340,240	2,811,384	10,106,117	16,545,097	1,799,921	40,016,738	24,256,099

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.<sup>2</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.<sup>3</sup> See GENERAL EXPLANATIONS—Wage earners and wages.<sup>4</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.<sup>5</sup> Alabama, 3 establishments; Arkansas, 2; District of Columbia, 1; Georgia, 3; Iowa, 2; Kansas, 2; Mississippi, 2; Missouri, 2; Rhode Island, 1; South Carolina, 4; Tennessee, 6; Texas, 2.

## PAPER AND PAPERBOARD MILLS

643

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939, 1937, AND 1929

	1939		1937		1929	
	Quantity (short tons)	Value	Quantity (short tons)	Value	Quantity (short tons)	Value
"Paper and Paperboard Mills" industry, all products, total value.....		\$933, 015, 664		\$957, 939, 764		\$967, 186, 026
Paper and paperboard made in this industry (produced for sale and produced for transfer to other plants of same company).....	12, 039, 168	757, 695, 002	11, 694, 757	809, 613, 157	9, 943, 851	817, 024, 663
Miscellaneous products not classifiable.....		<sup>1</sup> 160, 121		187, 110		
Other products (not classified in this industry).....		<sup>2</sup> 175, 062, 542		148, 134, 836		150, 161, 363
Receipts for contract and repair work.....		97, 999		4, 661		
Paper and paperboard, aggregate.....	13, 509, 642	848, 915, 555	12, 837, 003	887, 920, 461	11, 140, 235	903, 301, 140
Paper and paperboard produced in this industry, total.....	13, 493, 476	847, 276, 506	12, 830, 503	886, 913, 712	11, 140, 235	903, 301, 140
Produced for sale and for interplant transfer, total.....	12, 039, 168	757, 695, 002	11, 694, 757	809, 613, 157	9, 943, 851	817, 024, 663
Produced for sale.....	9, 835, 151	642, 088, 455	9, 330, 276	672, 446, 711	8, 331, 297	715, 145, 798
Produced for transfer to other plants of same company.....	2, 204, 017	115, 606, 547	2, 364, 481	137, 166, 446	1, 612, 554	101, 878, 865
Produced for use in same plant.....	1, 454, 308	89, 581, 504	1, 135, 746	77, 300, 555	1, 106, 384	86, 276, 477
Paper and paperboard made as secondary products in other industries.....	16, 166	1, 639, 049	6, 500	1, 006, 749	( <sup>3</sup> )	( <sup>3</sup> )

<sup>1</sup> Principally value of steam sold to outside concerns.<sup>2</sup> Principally value of converted paper products, such as paper bags, boxes and containers, coated book paper, sanitary napkins, toilet paper, towels, and waxed paper.<sup>3</sup> No data.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1939, 1937, AND 1929

	1939		1937		1929	
	Quantity (short tons)	Value	Quantity (short tons)	Value	Quantity (short tons)	Value
Paper and paperboard, <sup>1</sup> aggregate value .....	13, 509, 642	\$848, 915, 555	12, 837, 003	\$887, 920, 461	11, 140, 235	\$903, 301, 140
Newsprint, total .....	954, 259	39, 764, 572	975, 854	37, 036, 644	1, 409, 169	80, 706, 899
Standard, in rolls .....	925, 897	38, 626, 410	929, 202	35, 106, 048	2 1, 409, 169	2 80, 706, 899
Standard, in sheets, and other special grades .....	28, 362	1, 138, 162	46, 652	1, 930, 596		
Groundwood printing and specialty papers, total .....	540, 342	33, 876, 716	518, 332	32, 617, 672	363, 422	28, 008, 226
Hanging .....	116, 781	6, 943, 163	126, 890	7, 785, 201	101, 002	7, 293, 931
Catalog .....	80, 632	6, 137, 839	100, 974	7, 399, 405	111, 771	9, 570, 858
Novel-news and news-tablet .....	39, 159	1, 819, 752	64, 342	2, 999, 972	3 150, 649	3 11, 743, 437
Poster and lining .....	33, 372	2, 240, 081	27, 249	1, 898, 647		
Printing (containing not more than 34 percent bleached pulp and not less than 50 percent ground-wood pulp) .....	81, 455	4, 780, 909	54, 433	3, 735, 004	(4)	(4)
Rotogravure .....	106, 121	7, 351, 913	144, 444	8, 799, 443		
Other groundwood papers .....	82, 822	4, 603, 059				
Book paper, total .....	1, 534, 591	138, 846, 261	1, 510, 011	145, 539, 030	1, 497, 912	168, 271, 655
Machine-finished, sized, and supercalendared .....	1, 022, 120	91, 883, 994	1, 028, 183	98, 262, 075	5 1, 176, 596	5 131, 852, 168
Converting paper:						
Body stock for coated paper—					250, 234	26, 755, 587
Free from ground wood .....	265, 635	21, 718, 280	280, 255	24, 299, 054		
Containing ground wood .....	9, 374	710, 745	10, 061	914, 663		
Other converting paper .....	90, 784	8, 335, 225	52, 286	4, 824, 341	(4)	(4)
Lithograph .....	43, 449	4, 624, 077	50, 618	5, 683, 482	19, 877	2, 417, 196
Offset .....	66, 097	8, 352, 393	60, 460	8, 232, 638	26, 304	3, 847, 128
Other book paper .....	28, 132	3, 221, 639	27, 248	3, 372, 777	24, 901	3, 399, 576
Cover paper .....	19, 401	3, 449, 354	24, 437	4, 435, 204	28, 072	6, 420, 856
Text paper .....	12, 339	2, 305, 586	10, 512	1, 753, 572	(4)	(4)
Writing paper (fine), total .....	594, 594	83, 973, 218	578, 147	87, 271, 592	607, 590	113, 223, 595
One-hundred-percent rag .....	13, 420	7, 051, 769	11, 740	7, 407, 848	17, 397	11, 143, 620
Less than 100 percent to 50 percent rag .....	28, 017	8, 547, 557	31, 017	10, 349, 767	40, 416	15, 972, 906
Less than 50 percent rag .....	42, 460	9, 025, 811	35, 610	8, 009, 678	60, 806	15, 536, 771
Sulphite bond .....	364, 054	41, 627, 012	332, 229	41, 781, 971	234, 609	41, 724, 237
Other chemical wood-pulp writing paper .....	146, 643	17, 721, 069	167, 551	19, 722, 328	204, 362	28, 846, 061
Wrapping paper, total .....	2, 238, 993	174, 404, 823	2, 053, 387	179, 734, 517	1, 605, 783	163, 442, 382
Unbleached sulphite and semibleached sulphate:						
Butchers' and grocers' paper .....	140, 952	9, 808, 284	147, 293	11, 346, 439	404, 904	36, 987, 433
Machine-glazed wrapping .....	35, 711	2, 360, 812	4, 908	526, 685		
Other grades 6 .....	107, 007	6, 820, 347	147, 230	11, 854, 788		
Bleached sulphite and bleached sulphate:						
Waxing paper (18 pounds and up) .....	141, 007	15, 801, 335	123, 896	14, 334, 946	712, 234	68, 499, 471
Bag .....	38, 340	3, 803, 935	13, 470	1, 591, 422		
Machine-glazed wrapping .....	30, 081	2, 859, 986	35, 657	3, 782, 642		
Other grades .....	135, 329	11, 935, 171	93, 531	9, 203, 074		
Wrapping and envelope manila .....	19, 131	1, 661, 528	36, 597	2, 632, 978	7, 965	1, 607, 935
Grease-proof .....	18, 928	3, 287, 000	14, 876	2, 807, 746		
Glassine .....	55, 510	11, 031, 175	46, 833	9, 920, 864		
Kraft wrapping:						
Machine-finished—						
Wrapping .....	393, 580	26, 908, 777	376, 141	28, 877, 245	712, 234	68, 499, 471
Converting—						
Bag .....	615, 365	34, 538, 005	502, 256	35, 575, 093		
Other .....	176, 144	13, 999, 748	202, 751	17, 719, 264		
Machine-glazed—						
Wrapping .....	48, 342	3, 921, 656	33, 004	2, 909, 588		
Converting—						
Bag .....	22, 175	1, 586, 942	15, 881	1, 061, 342		
Other .....	20, 428	1, 876, 473	(8)	(8)		

See footnotes at end of table.



TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1939, 1937, AND 1929—Continued

	1939		1937		1929	
	Quantity (short tons)	Value	Quantity (short tons)	Value	Quantity (short tons)	Value
Wrapping paper—Continued.						
Bogus and screenings.....	29,632	\$1,041,737	26,212	\$1,290,073	38,529	\$2,080,111
Heavy (mill wrappers, etc.).....	37,352	1,496,785	32,409	1,509,963	63,238	3,423,428
Rope and jute.....	22,340	4,103,674	16,983	3,132,715	9 62,270	12,075,511
Tagboard, light manila board, and pattern.....	49,008	5,410,894	59,820	6,125,267	30,616	3,503,586
Other wrapping paper <sup>10</sup> .....	97,625	10,150,559	123,339	13,532,383	238,589	25,621,956
Tissue paper, total.....	665,723	64,531,114	540,152	55,914,224	387,811	53,300,059
High-grade tissue (cigarette, condenser, carbon, etc.).....	17,294	8,398,730	37,618	10,031,827	11 63,834	11 15,307,069
Waxing (up to 18 pounds).....	39,147	3,875,254	26,808	3,465,195	12 58,742	12 8,305,063
Wrapping tissue (up to 18 pounds).....	56,263	6,908,364	60,634	7,776,345	13 40,691	13 5,543,375
Toweling.....	129,105	9,156,326	93,284	6,390,818	52,283	4,903,065
Toilet tissue.....	285,085	21,358,098	254,221	20,720,440	142,725	15,102,952
Napkin stock.....	70,098	6,593,595	55,576	5,739,376	29,536	4,138,515
Pattern tissue.....	3,572	611,817	6,237	928,767		
Sales-book tissue.....	1,052	150,724	2,395	336,862	( <sup>4</sup> )	( <sup>4</sup> )
Carpet twisting.....	7,305	1,074,869	3,379	524,594		
Other tissue.....	56,802	6,403,337	( <sup>4</sup> )	( <sup>4</sup> )		
Absorbent paper, total.....	121,717	19,606,359	138,064	22,120,473	90,800	16,972,984
Blotting.....	10,693	1,883,147	11,794	2,185,230	14,125	2,828,427
Filter.....	1,505	424,927	1,435	385,804	( <sup>14</sup> )	( <sup>14</sup> )
Matrix paper and board.....	3,463	1,510,436	3,739	1,658,771	15 4,281	15 1,616,233
For vulcanized fiber.....	13,647	2,323,341	17,971	3,029,374	25,928	4,106,713
Other absorbent paper (including paper for parchmentizing).....	92,409	13,464,508	103,125	14,861,294	46,466	8,521,611
Building paper, total.....	659,090	31,105,249	608,086	32,630,126	659,178	39,375,990
Sheathing paper.....	44,408	1,540,136	48,253	1,936,845	52,205	2,214,947
Felts.....	567,866	24,944,206	523,663	27,855,260	540,166	32,544,935
Asbestos-filled and asbestos paper.....	42,615	4,475,761	36,170	2,838,021	66,807	4,616,108
Other building paper.....	4,201	145,146			( <sup>4</sup> )	( <sup>4</sup> )
Other paper.....	63,625	8,473,701	77,985	11,427,872	39,311	5,227,977
Boards, total.....	6,104,968	248,578,602	5,802,036	277,339,535	4,461,187	227,741,517
Container boards:						
Liners—						
Kraft.....	1,385,523	50,776,352	977,561	45,678,709		
Jute.....	819,654	28,353,295	1,019,995	43,207,483	1,108,852	55,212,515
Other.....	137,968	6,364,336	147,012	6,739,921		
Chip (plain and test).....	450,995	14,132,337	506,013	18,457,834	785,199	27,865,152
Straw (for corrugated-container use).....	399,189	12,192,752	441,312	16,895,781	361,486	16,085,279
Other container boards.....	168,112	6,382,619	75,657	3,423,586	( <sup>15</sup> )	( <sup>15</sup> )
Folding boxboards (bending):						
Manila-lined (all lined boards).....	784,725	33,734,425	798,220	41,128,607	590,523	30,869,321
Patent-coated.....	262,029	14,461,252	244,591	14,472,244	182,831	11,195,066
Other folding boxboards.....	313,207	12,672,949	246,213	11,697,891	217,931	11,085,633
Set-up boxboards (nonbending):						
Chip and straw.....	414,335	13,547,779	332,034	13,936,028	325,111	11,753,491
Newsboard.....	251,959	7,692,751	251,458	9,864,394	189,028	7,430,984
Other (including tube, egg-case, etc.).....	199,191	8,868,855	136,818	5,953,517	85,526	3,859,432
Binder's board.....	28,054	1,760,450	51,913	3,620,887	64,165	4,675,097
Cardboard:						
Blanks and miscellaneous.....	21,911	1,763,086	21,181	1,544,434		
Clay-coated cardboard.....	31,669	2,597,478	25,618	2,153,118	47,233	4,921,690
Other cardboard <sup>17</sup> .....	5,294	479,868	4,519	469,979		
Bristol board:						
Index.....	23,782	3,505,407	20,445	2,592,804		
Mill (including specialties).....	45,429	5,024,664	46,273	5,239,750	( <sup>4</sup> )	( <sup>4</sup> )
Uncoated postcard.....	5,263	459,511	6,821	612,039		
Leatherboard.....	25,714	1,978,283	27,174	2,238,888	24,228	2,942,498
Pressboard.....	7,619	1,328,645	8,623	1,521,648	11,901	2,480,486
Other boards <sup>18</sup> .....	318,346	20,501,508	412,585	25,989,993	10 457,173	10 37,864,873

<sup>1</sup> Includes data for paper and paperboard made and used in the same plants in the manufacture of converted paper products, as follows: 1939, 1,454,308 tons, valued at \$89,581,504; 1937, 1,135,746 tons, valued at \$77,300,555; 1929, 1,196,384 tons, valued at \$86,276,477.

<sup>2</sup> "Standard, in rolls and sheets" only.

<sup>3</sup> Poster-novel, news-tablet, lining, etc.

<sup>4</sup> Not reported separately.

<sup>5</sup> Reported as "Book papers."

<sup>6</sup> Includes figures for "Bag" not shown separately to avoid disclosing figures for individual establishments for 1939.

<sup>7</sup> Includes figures for "Other," "Machine-glazed," converting, kraft wrapping paper.

<sup>8</sup> Included in figures for "Other," "Machine-finished," converting, kraft wrapping paper.

<sup>9</sup> Reported as "Rope, jute, etc."

<sup>10</sup> Includes data for "Vegetable and imitation parchment" not shown separately to avoid disclosing figures for individual establishments for 1939.

<sup>11</sup> Reported as "High grade" only.

<sup>12</sup> Reported as "Waxing" only.

<sup>13</sup> Published in 1929 report as "Manila and No. 2 white."

<sup>14</sup> Included in "Other absorbent paper."

<sup>15</sup> Reported as "Matrix paper" only.

<sup>16</sup> Figures for "Other container boards" included in those for "Other boards."

<sup>17</sup> Includes figures for "Photomounts" not shown separately to avoid disclosing figures for individual establishments for 1939.

<sup>18</sup> Figures include data for "Wallboard," "Insulating board," and "Other building boards," as follows: For 1939, 114,605 tons, valued at \$5,554,534; for 1937, 110,006 tons, valued at \$5,823,409; for 1929, data not available.

# PAPER AND PAPERBOARD MILLS

645

TABLE 5.—PAPER AND PAPERBOARD PRODUCTS, BY QUANTITY AND VALUE, BY STATES: 1939, 1937, AND 1929

[This table shows, by States, the output of the principal products for which separate figures can be given without disclosing the production of individual establishments. Where the product of chief importance cannot be shown, only the State total is given]

STATE	1939		1937		1929	
	Quantity (short tons)	Value	Quantity (short tons)	Value	Quantity (short tons)	Value
United States.....	13,500,642	\$848,915,555	12,837,003	\$887,920,461	11,140,235	\$903,301,140
California.....	294,846	13,588,242	278,050	14,737,489	253,800	15,140,414
Building papers.....	58,937	3,087,066	60,189	3,158,406	(1)	(1)
Other.....	235,909	10,500,576	218,461	11,579,083	253,800	15,140,414
Connecticut.....	168,729	10,971,044	212,205	14,179,283	197,060	15,656,533
Boards.....	156,722	8,524,376	201,015	11,861,013	189,156	12,474,337
Tissue papers.....	7,494	1,735,287	(1)	(1)	(1)	(1)
Other.....	4,513	711,381	11,190	2,318,270	7,904	3,182,196
Delaware.....	14,843	1,984,464	36,389	2,735,045	39,366	4,817,327
Florida.....	370,778	14,125,130	(2)	(2)		
Boards.....	370,778	14,125,130	(2)	(2)		
Illinois.....	571,589	22,985,791	593,854	27,634,366	596,577	20,748,082
Boards.....	412,304	13,431,839	452,597	18,436,844	406,597	16,835,403
Building papers.....	132,841	6,324,555	120,895	6,089,826	133,269	7,817,275
Wrapping papers.....	14,080	1,435,321	(1)	(1)	(1)	(1)
Other.....	11,764	1,794,076	20,362	3,107,696	56,711	5,095,404
Indiana.....	267,056	12,327,156	295,981	14,221,647	348,760	18,120,354
Boards.....	244,830	10,626,189	277,587	12,566,762	315,630	15,370,414
Other.....	22,226	1,700,967	18,394	1,654,785	33,139	2,749,940
Louisiana.....	593,902	25,650,456	533,077	28,558,171	273,674	18,041,807
Boards.....	341,179	12,325,890	308,729	13,837,673	110,534	6,431,155
Wrapping papers.....	225,294	12,239,200	210,103	13,953,555	143,758	10,887,062
Other.....	27,429	1,085,366	15,145	766,943	10,282	722,690
Maine.....	1,034,976	66,158,088	1,038,775	67,212,313	1,061,884	87,021,341
Newsprint, in rolls and sheets.....	485,504	19,940,244	480,444	18,005,529	560,626	31,482,173
Book papers.....	166,780	14,669,672	(1)	(1)	(1)	(1)
Groundwood printing and specialty papers.....	147,657	8,067,331	157,539	8,559,948	(1)	(1)
Wrapping papers.....	106,866	10,288,620	133,869	12,349,872	(1)	(1)
Writing papers.....	71,218	8,570,582	67,770	7,360,425	(1)	(1)
Other.....	56,651	4,603,589	209,153	20,936,639	500,758	55,539,168
Maryland.....	155,525	8,489,049	167,189	10,892,652	166,348	9,453,897
Boards.....	62,603	2,207,766	59,592	2,655,310	(1)	(1)
Other.....	92,922	6,281,283	107,597	8,237,342	109,348	9,453,897
Massachusetts.....	519,459	62,117,024	514,039	65,957,345	562,462	91,044,282
Boards.....	212,300	12,166,437	203,473	12,904,439	182,166	13,186,124
Book papers.....	98,521	10,611,398	116,042	13,818,168	144,945	20,833,368
Writing papers.....	82,025	20,818,102	80,476	22,032,493	89,769	35,006,982
Wrapping papers.....	64,445	7,614,158	63,080	8,060,581	65,996	10,735,863
Tissue papers.....	26,540	6,444,181	18,441	4,823,249	14,174	3,903,301
Text papers.....	6,637	1,434,767	(1)	(1)	(1)	(1)
Cover papers.....	6,593	1,061,355	7,436	1,407,219	(1)	(1)
Absorbent papers.....	2,085	493,431	8,476	1,282,657	(1)	(1)
Other.....	20,313	1,473,195	16,615	1,628,539	65,412	7,378,644
Michigan.....	1,225,977	74,953,540	1,218,426	80,560,995	1,092,111	82,016,379
Boards.....	755,712	31,267,481	784,574	37,252,359	640,143	32,746,893
Book papers.....	187,564	16,432,639	165,257	15,754,615	186,043	19,395,085
Wrapping papers.....	116,231	12,125,134	111,915	12,439,430	92,996	9,892,052
Writing papers.....	59,351	6,603,393	48,579	6,541,452	(1)	(1)
Tissue papers.....	23,463	2,752,422	20,997	2,687,460	(1)	(1)
Other.....	83,656	5,772,471	87,104	5,885,679	172,929	19,982,349
Minnesota.....	301,774	16,775,823	293,059	17,513,187	318,387	21,647,522
Groundwood printing and specialty papers.....	65,641	3,671,566	57,029	3,291,253	(1)	(1)
Newsprint, in rolls and sheets.....	50,595	2,396,331	(1)	(1)	121,563	7,324,388
Other.....	185,538	10,707,926	236,030	14,221,934	196,824	14,323,134
New Hampshire.....	166,211	15,296,824	153,924	16,016,301	195,547	22,206,610
Wrapping papers.....	54,178	4,791,397	60,602	5,984,809	80,991	9,314,017
Tissue papers.....	49,836	4,180,036	30,005	2,619,611	30,425	3,584,077
Writing papers.....	24,583	2,730,445	14,868	1,774,298	26,575	3,875,333
Boards.....	20,763	1,620,118	18,815	1,582,676	(1)	(1)
Book papers.....	14,498	1,550,744	20,057	2,100,447	(1)	(1)
Other.....	2,353	424,084	14,577	1,953,460	57,556	5,433,183
New Jersey.....	740,691	37,920,846	640,207	37,332,282	604,940	37,074,136
Boards.....	556,714	20,677,768	471,954	21,139,617	433,560	18,874,082
Building papers.....	116,145	5,888,835	114,548	6,634,726	122,139	7,320,003
Tissue papers.....	4,960	1,781,951	(1)	(1)	(1)	(1)
Other.....	62,872	9,572,292	53,705	9,657,939	49,241	10,880,051

See footnotes at end of table.

TABLE 5.—PAPER AND PAPERBOARD PRODUCTS, BY QUANTITY AND VALUE, BY STATES: 1939, 1937, AND 1929—  
Continued

STATE	1939		1937		1929	
	Quantity (short tons)	Value	Quantity (short tons)	Value	Quantity (short tons)	Value
New York.....	1,386,857	\$101,008,860	1,415,027	\$107,919,128	1,512,855	\$124,711,686
Boards.....	433,190	21,816,561	450,520	24,111,792	442,427	26,066,202
Groundwood printing and specialty papers.....	184,036	12,452,606	174,819	11,545,090	(1)	(1)
Wrapping papers.....	174,863	14,775,159	179,825	16,827,909	200,952	20,293,568
Book papers.....	154,608	13,732,450	175,487	15,869,326	182,593	19,485,201
Tissue papers.....	143,417	13,887,028	131,248	11,826,261	95,225	11,557,173
Newsprint, in rolls and sheets.....	107,081	4,647,699	105,218	4,058,693	235,072	13,420,219
Building papers.....	83,083	4,503,950	79,228	5,043,188	60,695	3,979,953
Writing papers.....	53,304	5,627,558	60,237	6,632,194	(1)	(1)
Absorbent papers.....	33,600	5,490,355	39,893	6,591,169	(1)	(1)
Other.....	19,615	4,375,494	18,552	5,413,506	295,891	29,900,370
North Carolina.....	128,022	9,627,226	(2)	(2)	69,616	5,552,263
Boards.....	55,844	3,112,372	(2)	(2)	(1)	(1)
Other.....	72,178	6,514,854	(2)	(2)	69,616	5,552,263
Ohio.....	961,265	63,013,885	1,037,884	72,822,688	936,572	72,284,788
Boards.....	506,766	19,574,362	561,355	25,441,854	500,874	22,349,366
Book papers.....	244,421	23,337,887	265,310	26,176,096	227,335	26,038,088
Wrapping papers.....	70,729	6,121,550	70,358	6,869,182	58,388	6,801,987
Writing papers.....	61,821	7,886,112	54,303	7,566,107	54,013	8,162,772
Building papers.....	57,081	2,667,722	63,718	3,287,537	73,195	4,783,045
Other.....	20,447	3,426,252	22,840	3,481,912	22,767	4,149,530
Oregon.....	260,402	15,399,590	273,630	16,051,586	222,731	16,158,578
Wrapping papers.....	74,517	6,153,392	72,793	5,868,756	(1)	(1)
Tissue papers.....	14,290	891,966	11,451	1,004,095	(1)	(1)
Other.....	171,595	8,354,232	189,386	9,178,735	222,731	16,158,578
Pennsylvania.....	916,152	65,523,857	846,720	65,241,872	748,960	67,117,895
Boards.....	314,909	11,531,385	307,247	13,570,757	268,256	11,815,392
Book papers.....	226,713	20,653,430	235,780	22,421,605	210,178	23,438,352
Wrapping papers.....	71,732	6,257,031	69,620	6,846,261	62,627	6,875,780
Writing papers.....	63,488	8,668,823	59,213	8,796,625	61,384	11,342,639
Building papers.....	61,432	2,816,863	45,196	2,100,862	64,566	3,661,166
Absorbent papers.....	18,998	2,826,704	11,954	1,867,648	(1)	(1)
Other.....	158,880	12,769,621	117,710	9,638,114	82,049	9,984,576
Tennessee.....	116,374	5,619,470	104,881	5,524,324	83,564	4,407,312
Boards.....	84,054	2,973,556	87,003	3,579,235	(1)	(1)
Other.....	32,320	2,645,914	17,878	1,945,089	83,564	4,407,312
Vermont.....	83,298	6,323,666	82,071	6,600,838	72,677	6,763,124
Groundwood printing and specialty papers.....	7,752	501,512	(1)	(1)	(1)	(1)
Other.....	75,546	5,822,154	82,071	6,600,838	72,677	6,763,124
Virginia.....	510,844	26,334,888	461,541	29,126,373	242,455	20,296,760
Boards.....	312,913	12,116,867	293,933	14,809,602	86,090	4,590,873
Wrapping papers.....	137,427	8,417,154	(1)	(1)	89,637	7,801,947
Book papers.....	48,007	4,102,123	50,022	4,545,847	(1)	(1)
Other.....	12,477	1,698,744	117,586	9,770,929	66,728	7,904,146
Washington.....	552,577	32,387,257	546,227	35,624,530	382,253	27,679,043
Boards.....	135,181	5,424,221	156,229	7,593,738	98,700	4,994,567
Other.....	417,396	26,963,036	389,998	28,030,792	283,553	22,684,476
West Virginia.....	55,897	4,260,252	53,586	4,478,252	51,889	5,016,561
Wrapping papers.....	29,976	2,873,247	16,052	1,768,537	19,305	2,620,119
Other.....	25,921	1,387,005	37,534	2,709,715	32,584	2,396,442
Wisconsin.....	1,010,974	87,794,799	940,867	87,202,056	886,146	85,240,423
Wrapping papers.....	241,358	22,920,151	254,414	25,472,052	251,402	25,319,055
Book papers.....	220,243	18,550,174	172,087	14,760,529	135,306	12,494,303
Boards.....	170,308	7,629,325	168,117	8,940,081	167,120	8,134,518
Tissue papers.....	143,583	11,896,526	123,381	11,743,749	(1)	(1)
Writing papers.....	100,355	14,789,945	98,523	15,664,852	(1)	(1)
Groundwood printing and specialty papers.....	68,335	5,093,416	63,590	5,044,114	(1)	(1)
Other.....	66,792	6,935,262	60,755	5,576,679	342,318	39,292,457
Other Southern States <sup>5</sup> .....	943,968	42,435,351	938,378	52,615,352	277,192	16,084,017
Other States <sup>6</sup> .....	156,656	5,842,977	154,516	7,163,481		

<sup>1</sup> Included in "Other" to avoid disclosing data for individual establishments.<sup>2</sup> Withheld to avoid disclosing data for an individual establishment. Included in "Other Southern States."<sup>3</sup> "Text papers" included in "Book papers."<sup>4</sup> Not called for on schedule.<sup>5</sup> For 1939 and 1937: Alabama, Arkansas, Georgia, Mississippi, South Carolina, and Texas. In addition, Florida and North Carolina for 1937.<sup>6</sup> For 1939 and 1937: District of Columbia, Iowa, Kansas, Missouri, and Rhode Island. For 1929: Alabama, Arkansas, Colorado, District of Columbia, Georgia, Iowa, Kansas, Missouri, Mississippi, Rhode Island, South Carolina, and Texas.

# PAPER AND PAPERBOARD MILLS

647

TABLE 6.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939, 1937, AND 1929, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939	110,575	106,365	107,452	107,403	108,265	107,927	108,248	108,339	109,547	112,225	116,043	117,560	117,528
1937	110,809	108,167	109,568	111,455	112,935	112,691	113,258	113,240	112,217	110,491	107,646	107,646	104,863
1929	103,320	102,082	103,231	103,311	102,809	102,847	103,614	103,508	104,241	104,036	104,309	103,489	102,362
Alabama	1,127	1,135	1,117	1,124	1,172	1,105	1,087	1,097	1,114	1,137	1,134	1,127	1,170
California	2,171	2,039	2,059	2,036	2,073	2,116	2,143	2,209	2,236	2,274	2,315	2,296	2,260
Connecticut	1,754	1,663	1,718	1,710	1,677	1,681	1,729	1,728	1,747	1,830	1,818	1,865	1,888
Delaware	341	340	326	327	336	329	339	343	334	332	318	379	386
Florida	940	921	957	930	931	921	948	938	934	936	956	949	954
Georgia	572	606	586	585	590	582	561	570	557	563	541	549	577
Illinois	3,649	3,476	3,504	3,533	3,508	3,600	3,612	3,598	3,631	3,682	3,835	3,875	3,842
Indiana	1,832	1,735	1,801	1,839	1,816	1,747	1,718	1,830	1,827	1,812	1,890	1,973	1,998
Louisiana	2,536	1,810	1,866	1,860	2,130	2,324	2,382	2,448	2,514	3,011	3,310	3,316	3,455
Maine	7,773	7,602	7,581	7,638	7,637	7,672	7,580	7,512	7,582	7,748	8,139	8,278	8,311
Maryland	1,800	1,655	1,757	1,766	1,767	1,758	1,631	1,822	1,912	1,914	1,952	1,824	1,840
Massachusetts	9,904	9,696	9,819	9,797	9,839	9,785	9,720	9,659	9,690	9,881	10,294	10,349	10,322
Michigan	11,912	11,473	11,486	11,592	11,659	11,595	11,725	11,640	11,864	12,164	12,495	12,730	12,516
Minnesota	1,966	1,869	1,939	1,952	1,914	1,914	1,935	1,964	1,956	2,010	2,063	2,085	1,996
New Hampshire	2,272	2,278	2,315	2,243	2,221	2,256	2,239	2,215	2,236	2,266	2,352	2,374	2,272
New Jersey	4,468	4,490	4,514	4,391	4,422	4,031	4,206	4,158	4,466	4,561	4,789	4,803	4,788
New York	12,700	12,255	12,312	12,340	12,527	12,486	12,502	12,433	12,488	12,733	13,227	13,459	13,640
North Carolina	1,100	968	981	982	1,009	1,025	1,031	1,017	1,024	1,141	1,266	1,365	1,393
Ohio	8,933	8,834	8,896	8,753	8,717	8,840	8,793	8,738	8,721	8,897	9,162	9,435	9,414
Oregon	1,746	1,697	1,731	1,724	1,720	1,708	1,683	1,695	1,727	1,797	1,820	1,824	1,830
Pennsylvania	8,508	8,129	8,239	8,316	8,421	8,283	8,341	8,484	8,473	8,620	8,855	8,964	8,968
South Carolina	928	915	927	924	922	924	918	916	922	917	935	972	948
Tennessee	736	701	686	699	743	763	720	685	740	749	754	799	790
Vermont	745	687	765	742	720	736	728	728	733	751	790	783	782
Virginia	2,542	2,416	2,486	2,527	2,525	2,506	2,528	2,495	2,506	2,580	2,636	2,661	2,640
Washington	3,137	2,986	2,976	3,009	3,041	3,095	3,150	3,150	3,173	3,297	3,305	3,235	3,227
West Virginia	703	682	672	662	638	654	686	677	697	727	792	774	770
Wisconsin	11,081	10,744	10,833	10,870	10,930	10,939	10,977	10,997	11,101	11,136	11,303	11,536	11,546

TABLE 7.—PRINCIPAL MATERIALS CONSUMED, BY KIND, QUANTITY, AND COST, FOR THE UNITED STATES: 1939<sup>1</sup> AND 1929

	1939		1929	
	Quantity (short tons)	Cost	Quantity (short tons)	Cost
Wood pulp, total	8,650,423	\$276,518,844	6,289,318	\$302,923,324
Mechanical	1,749,118	34,445,044		
Soda	515,650	22,211,988		
Sulphite	2,912,704	131,719,989	( <sup>2</sup> )	( <sup>2</sup> )
Sulphate	3,354,338	86,505,597		
Semichemical	118,613	1,636,226		
Manila stock (rope, jute, bagging, etc.)	64,149	2,232,647	128,800	6,115,292
Rags	468,287	14,808,348	739,492	33,249,233
Waste paper (paper stock)	4,366,257	57,293,159	3,841,942	74,232,577
Straw	512,993	3,400,220	575,263	5,197,706
Other fiber (cotton, etc.)	115,173	3,186,458	( <sup>2</sup> )	( <sup>2</sup> )
Casein	17,587	3,244,243	18,451	4,346,664
Clay	427,481	7,480,640	470,528	7,120,281
Rosin	35,915	1,040,926	38,390	2,155,114
Rosin sizing	94,325	4,980,259	99,443	6,567,703
Other nonfibrous materials (alum, starch, etc.)	571,115	22,928,742	( <sup>2</sup> )	( <sup>2</sup> )

<sup>1</sup> No data for 1937.

<sup>2</sup> Not called for on schedule.

TABLE 8.—PAPER MACHINES, BY TYPE, NUMBER, AND CAPACITY, AND BY KIND OF PAPER MADE: 1939, 1937, AND 1929

[See "Paper-making machines," p. 641]

	Total capacity per year of 310 days	FOURDRINIER		CYLINDER	
		Num-ber	Capacity per 24 hours	Num-ber	Capacity per 24 hours
Aggregate:	Short tons		Short tons		Short tons
1939	16,557,410	885	30,383	684	23,028
1937	15,572,850	873	27,513	687	22,722
1929	13,704,480	937	22,131	738	22,077
Standard newsprint:					
1939	988,280	40	3,188		
1937	1,000,370	44	3,227		
1929	1,695,080	126	5,461	1	7

TABLE 8.—PAPER MACHINES, BY TYPE, NUMBER, AND CAPACITY, AND BY KIND OF PAPER MADE: 1939, 1937, AND 1929—Continued

	Total capacity per year of 310 days	FOURDRINIER		CYLINDER	
		Num-ber	Capacity per 24 hours	Num-ber	Capacity per 24 hours
Hanging, catalog, novel-news, etc. <sup>1</sup> :	Short tons		Short tons		Short tons
1939	631,470	56	2,033	1	4
1937	557,070	53	1,797	( <sup>2</sup> )	( <sup>2</sup> )
1929	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )	( <sup>2</sup> )
Book paper:					
1939	1,936,260	210	6,242	1	4
1937	1,904,640	218	6,131	1	13
1929	1,774,750	239	5,691	4	34
Cover paper:					
1939	30,070	5	93	1	4
1937	40,300	9	123	2	7
1929	46,810	13	132	3	19
Writing paper:					
1939	747,100	134	2,379	4	31
1937	757,020	141	2,442		
1929	623,410	143	1,984	2	27
Wrapping paper:					
1939	2,609,580	214	7,898	37	520
1937	2,351,660	201	7,000	40	586
1929	2,039,800	206	5,597	69	983
Tissue paper:					
1939	792,980	125	1,882	92	676
1937	648,210	104	1,537	79	554
1929	442,680	102	952	94	476
Absorbent paper:					
1939	165,850	36	495	16	40
1937	180,420	42	522	25	60
1929	148,800	36	369	16	111
Building paper:					
1939	938,370	8	377	61	2,650
1937	859,630	8	375	63	2,398
1929	911,090	5	230	72	2,709
Other paper:					
1939	86,490	12	181	10	98
1937	105,400	9	191	13	149
1929	326,190	38	973	7	76
Boards:					
1939	7,630,960	45	5,615	461	19,001
1937	7,168,130	44	4,168	464	18,955
1929	5,696,870	29	742	470	17,635

<sup>1</sup> Includes news-tablet, poster-lining, rotogravure, and other printing and ground-wood papers.

<sup>2</sup> Not reported separately; included with "Standard newsprint."

## CENSUS OF MANUFACTURES: 1939

TABLE 9.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	638
Reporting expenditures for plant and equipment.....	536
Value of products:	
Total for the industry.....	\$933, 015, 664
Reporting expenditures for plant and equipment.....	883, 870, 167
Expenditures for plant and equipment:	
Total for the industry.....	37, 501, 951
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	9, 758, 757
Expenditures for new machinery and operating equipment.....	26, 112, 978
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	1, 136, 091
Expenditures unclassified.....	494, 125

TABLE 10.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total <sup>1</sup> .....	\$137, 109, 055	\$122, 542, 068
Finished products.....	42, 692, 903	38, 395, 714
Materials, supplies, etc. <sup>1</sup> .....	94, 416, 152	84, 146, 954
End of year, total <sup>1</sup> .....	142, 050, 110	151, 510, 217
Finished products.....	39, 907, 457	47, 009, 019
Materials, supplies, etc. <sup>1</sup> .....	102, 142, 653	104, 501, 198
Value of products for the industry, total.....	933, 015, 664	957, 939, 764
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	917, 759, 066	948, 493, 423
Value for establishments not reporting inventories.....	15, 256, 598	9, 446, 341

<sup>1</sup> Includes figures for 13 pulp mills, with combined products valued at \$14,037,144 for 1939, which were operated in conjunction with paper mills and inventories were not reported separately, and 10 pulp mills with combined products valued at \$14,596,394 for 1937.

TABLE 11.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929

[This table covers the power reported for "Paper and paperboard mills" and for "Pulp mills." Because of the fact that in many cases a paper mill and a pulp mill under common ownership are supplied with power from the same power plant, it is impossible to give separate power equipment figures for the two industries]

	1939	1929
Number of establishments.....	832	883
Number of establishments reporting power equipment.....	804	749
Prime movers, aggregate:		
Number.....	4, 107	4, 745
Horsepower.....	2, 745, 059	2, 168, 012
Prime movers, driving generators, total—		
Number.....	1, 695	14, 745
Horsepower.....	2, 127, 938	12, 168, 012

TABLE 11.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929—Continued

	1939	1929
Prime movers—Continued.		
Prime movers, driving generators—Continued.		
Steam engines—		
Number.....	393	12, 248
Horsepower.....	177, 409	1, 533, 968
Steam turbines—		
Number.....	617	1, 717
Horsepower.....	1, 478, 697	1, 746, 988
Diesel and semi-Diesel engines—		
Number.....	6	
Horsepower.....	1, 730	1, 74
Other internal-combustion engines <sup>2</sup> —		
Number.....	9	17, 983
Horsepower.....	2, 168	
Hydroturbines and water wheels—		
Number.....	670	1, 1, 706
Horsepower.....	467, 934	1, 869, 073
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	188, 942	
Prime movers not driving generators, total—		
Number.....	2, 412	
Horsepower.....	617, 121	
Steam engines—		
Number.....	1, 118	
Horsepower.....	219, 106	
Steam turbines—		
Number.....	794	(3)
Horsepower.....	114, 400	
Diesel and semi-Diesel engines—		
Number.....	11	
Horsepower.....	1, 479	
Other internal-combustion engines <sup>2</sup> —		
Number.....	13	
Horsepower.....	1, 910	
Hydroturbines and water wheels—		
Number.....	476	
Horsepower.....	280, 226	
Prime movers not driving generators, ordinarily idle (included above), horsepower.....	33, 862	
Generators, kilowatt rating, total.....	1, 517, 066	945, 393
Generators, driven by—		
Steam engines, kilowatt rating.....	123, 052	
Steam turbines, kilowatt rating.....	1, 061, 038	
Diesel and semi-Diesel engines, kilowatt rating.....	1, 263	(3)
Other internal-combustion engines, <sup>2</sup> kilowatt rating.....	1, 563	
Hydroturbines and water wheels, kilowatt rating.....	331, 050	
Generators, ordinarily idle (included above), kilowatt rating.....	138, 567	(4)
Electric motors, total:		
Number.....	128, 523	70, 013
Horsepower.....	3, 213, 637	2, 000, 945
Driven by purchased energy—		
Number.....	39, 592	24, 470
Horsepower.....	1, 102, 675	800, 419
Driven by energy generated in establishments reporting—		
Number.....	88, 931	45, 543
Horsepower.....	2, 110, 962	1, 200, 526
Electric energy (kilowatt-hours):		
Generated in plant.....	6, 297, 943, 284	(4)
Sold.....	210, 499, 793	(5)
Purchased.....	2, 972, 958, 641	2, 826, 016, 927

<sup>1</sup> Includes data for prime movers not driving generators.

<sup>2</sup> Gas, gasoline, etc.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Data not available.

## CONVERTED PAPER PRODUCTS SUBGROUP

[Preliminary reports for these industries were issued September 21, 1940, and subsequent dates]

**Description of the industries.**—The industries included in the Converted Paper Products subgroup embrace establishments engaged primarily in the conversion of paper and paperboard into containers and other commodities. These industries are as follows:

- Coated and glazed paper.
- Envelopes.
- Paper bags, except those made in paper mills.
- Fiber cans, tubes, and similar products.
- Paperboard containers and boxes not elsewhere classified.
- Die-cut paper and paperboard, and converted cardboard.
- Wallpaper.
- Converted paper products not elsewhere classified.

**Statistics for earlier census years.**—The summary statistics presented in table 1 are not strictly comparable for all the census years shown, for the following reasons:

For 1939 establishments primarily engaged in the manufacture of printed and lithographed paper patterns were classified in the "Converted paper products not elsewhere classified" industry, while for previous census years such establishments were classified in the former "Printing and publishing, book, music, and job" industry or in the "Lithographing" industry. The figures for 1937 were revised in accordance with changes in classifications, but no revisions were made in the figures for previous census years.

For 1931 the industry classification "Labels and tags" was discontinued, and establishments engaged in the manufacture of printed labels and tags were transferred to the former "Printing and publishing, book and job" industry.

**TABLE 1.—SUMMARY FOR THE CONVERTED PAPER PRODUCTS SUBGROUP FOR THE UNITED STATES:  
1899 TO 1939**

[Figures for years prior to 1937 not strictly comparable. See "Statistics for earlier census years"]

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work <sup>3</sup>	Value of products	Value added by manufacture <sup>4</sup>	Horsepower of prime movers
1939.....	2,433	126,570	133,350,038	\$471,146,481	\$855,874,338	\$384,727,857	45,771
1937.....	2,233	128,322	133,613,242	490,983,296	867,251,726	376,268,430	( <sup>5</sup> )
1935.....	2,166	108,694	102,123,007	361,847,169	644,184,880	282,337,711	( <sup>7</sup> )
1933.....	1,916	89,082	73,647,958	260,983,517	477,088,593	216,105,076	( <sup>6</sup> )
1931.....	2,069	89,186	89,935,667	271,005,073	520,921,231	249,916,158	( <sup>6</sup> )
1929.....	2,243	105,344	114,253,011	369,361,396	686,136,843	316,775,447	39,340
1927.....	2,043	101,077	110,151,573	358,252,348	647,908,013	289,655,665	43,631
1925.....	1,964	97,660	102,951,437	313,797,212	574,931,804	261,134,592	43,260
1923.....	1,939	98,349	98,667,307	305,036,842	549,623,084	244,586,242	( <sup>7</sup> )
1921.....	1,862	79,462	75,674,033	223,077,821	404,364,469	181,286,648	( <sup>6</sup> )
1919.....	1,948	94,356	77,033,649	253,425,574	462,385,826	208,960,252	59,956
1914.....	1,734	78,295	35,598,594	101,651,540	187,542,496	85,890,956	56,171
1909.....	1,635	68,812	26,889,758	77,227,555	145,469,142	63,241,587	( <sup>7</sup> )
1904.....	1,337	55,238	19,453,211	51,019,075	97,081,678	46,062,603	( <sup>7</sup> )
1899.....	1,179	44,620	14,935,800	37,228,548	70,857,106	33,628,558	( <sup>7</sup> )

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Figures for years prior to 1935 do not include cost of contract work.

<sup>4</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>5</sup> Figures for 1937 have been revised for comparability with 1939 because of change in classification, but no revision was made for prior years.

<sup>6</sup> Not called for on schedule.

<sup>7</sup> Data not available.

## CENSUS OF MANUFACTURES: 1939

TABLE 2.—SUMMARY FOR THE CONVERTED PAPER PRODUCTS INDUSTRIES, BY VALUE, FOR THE UNITED STATES: 1939, 1937, AND 1929

	1939	1937	1929
Converted Paper Products industries, all products, total value.....	\$855,874,338	\$867,251,726	\$686,136,843
Converted paper products made in this group.....	830,771,230	852,499,169	(1)
Miscellaneous products not classifiable.....	2,702,711	1,329,882	
Other products (not classified in this subgroup).....	21,080,949	12,067,025	
Receipts for contract and repair work.....	1,319,448	1,355,650	
Converted paper products, aggregate value.....	1,030,186,842	1,015,303,685	861,588,771
Converted paper products made in the "Converted Paper Products" subgroup of industries.....	830,771,230	852,499,169	(1)
Converted paper products made in the "Paper and paperboard mills" industry.....	172,738,675	145,661,827	
Converted paper products made as secondary products in other industries.....	26,676,937	17,142,689	

(1) Data not available.

TABLE 3.—CONVERTED PAPER PRODUCTS—PRODUCTION, BY KIND AND VALUE: 1939, 1937, AND 1929

KIND	1939	1937	1929
Converted paper products, aggregate value.....	\$1,030,186,842	\$1,015,303,685	\$861,588,771
Bags, total <sup>1</sup> .....	96,570,838	97,483,720	79,124,252
Kraft.....	75,886,414	79,061,203	63,884,477
Glassine.....	5,520,823	5,628,499	(2)
Other paper.....	15,163,601	12,794,018	15,239,775
Boxes and containers, total.....	448,347,697	448,763,777	352,534,098
Paper and paperboard containers, total.....	425,269,447	424,580,993	333,423,432
Shipping containers, corrugated.....	187,282,159	191,757,522	97,959,464
Shipping containers, solid-fiber.....	26,241,429	29,262,396	42,035,357
Cartons and folding boxes.....	126,872,733	119,062,925	95,726,976
Set-up paper boxes.....	73,940,837	77,945,275	85,382,513
Decorated, lithographed, lacquered, and fancy-covered boxes.....	5,951,759	2,836,922	6,600,125
Other boxes and containers.....	4,980,530	3,715,953	5,718,997
Fiber and fiber and metal combination, total.....	23,078,250	24,172,784	19,110,666
Bottles.....	864,543	17,764,951	(2)
Cans.....	14,805,539		13,023,526
Drums and mailing cases.....	939,851		(2)
Tubes and cores.....	6,468,317		* 6,087,140
Bobbins, reels, ribbon blocks, spools, etc., fiber.....	840,034	(2)	(2)
Cones, fiber.....	2,734,781	(2)	(2)
Cards cut and designed, total.....	14,558,493	20,528,275	16,104,053
Index, library, etc., cards, plain.....	3,496,331	5,275,523	3,640,527
Jacquard cards for textile-fabric machines.....	248,730	287,270	476,304
Photograph mats, mounts, folders, etc.....	2,699,297	3,017,034	5,222,592
Other.....	8,114,135	11,948,448	6,764,630
Bottle caps.....	10,779,264	8,919,446	5,523,755
Cardboard (converted).....	9,643,997	7,269,946	6,937,388

TABLE 3.—CONVERTED PAPER PRODUCTS—PRODUCTION, BY KIND AND VALUE: 1939, 1937, AND 1929—Continued

KIND	1939	1937	1929
Coated and glazed paper, total.....	\$136,574,837	\$129,198,450	\$111,838,673
Coated book paper.....	37,978,864	43,731,242	49,514,438
Glazed and fancy paper.....	11,624,580	9,093,935	10,575,108
Waterproof wrapping paper.....	5,723,694	5,427,772	3,250,295
Waxed paper.....	57,403,072	53,394,544	35,464,098
Other coated.....	6,584,867	(2)	(2)
Gummed paper and tape, total.....	16,555,744	16,990,124	13,025,734
Gummed flat paper.....	4,264,739	4,657,015	2,247,730
Gummed paper tape.....	8,270,540	7,850,398	6,125,077
Gummed cloth tape.....	4,011,465	4,476,711	4,652,927
Cloth-lined paper.....	704,016	500,833	(2)
Coin wrappers.....	522,616	528,968	(2)
Confetti.....	37,878	(4)	61,016
Crepe paper.....	2,975,643	3,174,623	5,003,664
Cups, paper, total.....	17,412,990	13,641,932	10,713,637
Round.....	12,932,773	11,401,951	10,713,637
Conical or wedge-shape, nested.....	3,469,390	(2)	
Flat.....	1,010,827	2,239,981	
Dishes, spoons, etc., paper.....	2,848,256	3,040,637	6,113,115
Egg-case fillers and flats.....	1,691,189	1,917,122	(2)
Envelopes.....	50,194,653	48,523,793	57,657,514
Facial tissue and handkerchiefs.....	12,118,323	8,776,078	(2)
File folders.....	2,584,092	1,402,547	(2)
Labels, paper, unprinted.....	724,709	(4)	(6)
Napkins, paper.....	10,420,107	11,020,608	6,899,617
Papeteries, total.....	16,496,389	* 9,862,232	17,459,242
Unprinted.....	9,360,499	6,718,169	17,459,242
Printed.....	1,135,890	3,144,063	
Patterns, paper, total.....	10,246,549	9,970,773	12,965,867
Printed and lithographed.....	3,700,522	3,199,064	12,965,867
Unprinted.....	4,998,534	4,427,485	
Stencil or embroidery.....	1,547,493	2,344,224	
Rolls, paper (for adding machines, telegraph tape, etc.).....	2,780,562	3,188,022	1,768,206
Tablets, total.....	10,569,940	10,224,286	9,446,543
Book.....	2,045,401	1,659,949	809,755
News.....	2,009,592	2,270,313	2,232,570
Writing.....	5,684,459	5,574,520	4,204,303
Other.....	830,488	719,495	2,199,915
Tags (paper and paperboard), unprinted.....	1,900,881	1,695,590	(4)
Toilet paper (converted).....	39,016,620	35,263,062	25,323,220
Towels, paper.....	15,352,399	12,141,940	8,035,657
Vulcanized fiber, total.....	7,470,500	11,079,420	(1)
Rods, tubes, and other unfinished forms.....	2,690,789	2,948,657	
Laminated sheets and plates.....	2,903,652	4,767,728	
Hollow ware (boxes, cans, pails, etc.).....	1,448,515	2,044,259	
Other and not specified.....	427,564	1,918,776	
Wall paper <sup>1</sup> .....	24,953,799	26,771,546	30,004,881
Other converted paper and paperboard products <sup>2</sup> .....	85,818,806	90,317,892	98,074,373

<sup>1</sup> In addition, bags are made to some extent of transparent sheets of plastic materials (cellulose, etc.) which are classified in the "Fabricated plastic products, not elsewhere classified" industry.

<sup>2</sup> Not called for on schedule.

<sup>3</sup> "Tubes" only.

<sup>4</sup> Not shown separately to avoid disclosing data for individual establishments.

<sup>5</sup> Included in figure for "Other converted paper and paperboard products."

<sup>6</sup> Includes other stationery.

<sup>7</sup> No data.

<sup>8</sup> Number of rolls: 1939, 372,649,686; 1937, 411,186,355; and 1929, 373,893,950.

<sup>9</sup> Cigarette paper, lace paper, playing cards, and miscellaneous paper products for all years; in addition, seals for 1939, confetti for 1937; labels and tags, valued at \$30,897,857, and twisted paper (cord, twine, etc.), valued at \$424,782, for 1929.

CONVERTED PAPER PRODUCTS SUBGROUP

651

TABLE 4.—CONSUMPTION OF PAPER AND PAPERBOARD, BY KINDS OF PRODUCTS MADE: 1939

	Total value of products	QUANTITY OF PAPER AND PAPERBOARD USED AND VALUE OF PRODUCTS BOTH REPORTED		Value of products for establishments not reporting quantities of paper and paperboard used		Total value of products	QUANTITY OF PAPER AND PAPERBOARD USED AND VALUE OF PRODUCTS BOTH REPORTED		Value of products for establishments not reporting quantities of paper and paperboard used
		Quantity (short tons)	Value of products				Quantity (short tons)	Value of products	
Aggregate.....	\$1,030,186,842	6,912,032	\$751,547,937	\$278,638,905					
Bags:					Confetti.....	\$37,878	213	\$25,889	\$11,989
Kraft.....	75,886,414	709,778	70,645,461	5,240,953	Crepe paper.....	2,975,643	4,865	1,072,965	1,902,078
Glassine.....	5,520,823	10,173	4,069,717	1,451,106					
Other paper.....	15,163,601	39,836	9,270,698	5,892,903	Cups, paper:				
Boxes and containers (paper and paperboard):					Round.....	12,932,773	19,210	8,493,351	4,439,422
Shipping containers, corrugated.....	187,282,159	2,439,955	162,460,488	24,821,671	Conical or wedge-shape, nested.....	3,469,390	11,323	3,011,103	458,287
Shipping containers, solid-fiber.....	26,241,429	413,315	22,580,670	3,660,753	Flat.....	1,010,827	1,915	833,943	176,884
Cartons and folding boxes.....	126,872,733	985,403	104,827,130	22,045,603	Dishes, spoons, etc., paper.....	2,848,256	12,331	1,960,389	887,867
Set-up paper boxes.....	73,940,837	285,351	38,342,062	35,598,775	Egg-case fillers and flats.....	1,691,189	17,675	1,060,484	630,705
Decorated, lithographed, lacquered, and fancy-covered boxes.....	5,951,759	15,787	3,110,335	2,841,424	Envelopes.....	50,194,653	106,780	27,740,182	22,454,471
Other boxes and containers.....	4,980,530	5,921	1,024,397	3,956,133	Facial tissue and handkerchiefs.....	12,118,323	47,893	11,323,164	795,159
Fiber and fiber and metal combination—					File folders.....	2,584,092	4,489	1,081,462	1,502,630
Bottles.....	864,543	768	173,942	690,601	Labels, paper, unprinted.....	724,709	643	292,690	432,019
Cans.....	14,805,539	41,684	9,345,054	5,460,485	Napkins, paper.....	10,420,107	57,550	9,349,294	1,070,813
Drums and mailing cases.....	939,851	3,154	741,874	197,977	Papeteries:				
Tubes and cores.....	6,468,317	38,192	4,588,195	1,880,122	Unprinted.....	9,360,499	15,358	4,938,967	4,421,532
Bobbins, reels, ribbon blocks, spools, etc., fiber.....	840,034	2,836	461,839	378,195	Printed.....	1,135,890	1,275	408,843	727,547
Cones, fiber.....	2,734,781	15,185	2,248,970	485,811	Patterns, paper:				
Cards cut and designed:					Printed and lithographed.....	3,700,522	560	722,121	2,978,401
Index, library, etc., cards, plain.....	3,496,331	4,030	1,849,409	1,646,922	Unprinted.....	4,998,534	1,099	2,526,067	2,472,467
Jacquard cards for textile-fabric machines.....	248,730	329	122,228	126,502	Stencil or embroidery.....	1,547,493			1,547,493
Photograph mats, mounts, folders, etc.....	2,699,297	1,997	1,111,393	1,587,904	Rolls, paper (for adding machines, telegraph tape, etc.).....	2,780,562	7,506	1,294,163	1,486,399
Other.....	8,114,135	22,987	6,031,105	2,083,030	Tablets:				
Bottle caps.....	10,779,264	21,008	6,648,080	4,136,184	Book.....	2,045,401	12,175	2,028,982	16,419
Cardboard (converted).....	9,643,997	79,428	8,761,198	882,799	News.....	2,009,592	12,113	1,841,501	168,091
Coated and glazed paper:					Writing.....	5,684,459	27,076	4,902,385	782,074
Coated book paper.....	37,978,864	306,018	37,909,121	69,743	Other.....	830,488	4,610	539,418	291,070
Glazed and fancy paper.....	11,624,580	19,076	5,582,044	6,042,536	Tags (paper and paperboard), unprinted.....	1,900,881	1,334	652,749	1,248,132
Waterproof wrapping paper.....	5,723,694	34,072	3,392,373	2,331,321	Toilet paper (converted).....	39,016,620	280,466	38,987,757	28,863
Waxed paper.....	57,403,072	295,731	55,033,860	2,369,212	Towels, paper.....	15,352,399	140,381	15,328,608	23,791
Other coated.....	6,584,867	22,122	4,813,769	1,771,098	Vulcanized fiber:				
Gummed paper and tape—					Rods, tubes, and other unfinished forms.....	2,690,769	(1)	(1)	2,690,769
Gummed flat paper.....	4,264,739	12,862	3,112,253	1,152,486	Hollow ware (boxes, cans, pails, etc.).....	1,448,515	(1)	(1)	1,448,515
Gummed paper tape.....	8,279,540	41,117	6,553,441	1,726,099	Laminated sheets and plates.....	2,903,652	(1)	(1)	2,903,652
Gummed cloth tape.....	4,011,465	(1)	(1)	4,011,465	Other and not specified.....	427,564	(1)	(1)	427,564
Cloth-lined paper.....	704,016	926	652,042	51,974	Wallpaper <sup>2</sup> .....	24,953,799	(1)	(1)	24,953,799
Coin wrappers.....	522,616	370	183,724	338,892	Other converted paper and paperboard products.....	85,818,806	253,781	35,490,082	50,328,724

<sup>1</sup> Not called for on schedule.

<sup>2</sup> Quantity of paper not reported. Number of rolls, 372,649,686; weight per roll, 9 to 18 ounces.



# COATED AND GLAZED PAPER

[A preliminary report for this industry was issued December 11, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of coated book, waxed, and gummed paper (including gummed labels and paper and cloth tape), waterproofed wrapping paper, flypaper, cloth-lined paper, and other coated and glazed paper made from purchased stock. Carbon paper is included in the "Carbon paper and inked ribbons" industry, and photographic and blueprint paper in the "Photographic apparatus and materials and projection equipment (except lenses)" industry.

**Statistics for prior census years.**—At the census for 1939, "Coated and glazed paper" was established as a separate industry. Returns for establishments primarily engaged in the production of coated and glazed paper were previously classified in the "Paper goods not elsewhere classified" industry. The figures for the establishments classified in the "Coated and glazed

paper" industry were deducted from the statistics for 1937 and form this industry for comparison with 1939. No revisions were made, however, in the statistics for earlier years, and therefore comparable figures are not available for years prior to 1937.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1939 AND 1937

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work	Value of products	Value added by manufacture <sup>3</sup>	Horse-power of prime movers
1939.....	140	7,450	\$9,384,260	\$53,627,595	\$84,386,593	\$30,758,998	9,097
1937 <sup>4</sup> .....	103	7,240	8,614,339	51,950,312	78,522,258	26,571,946	( <sup>5</sup> )

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>4</sup> No comparable figures available for years prior to 1937.

<sup>5</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	Illinois	Massachusetts	Michigan	Missouri	New Jersey	New York	Ohio	Pennsylvania	Rhode Island	Wisconsin	Other States <sup>1</sup>
Number of establishments <sup>2</sup> .....	140	8	23	5	4	9	30	15	10	6	6	24
Proprietors and firm members.....	17		2				6		5			4
Persons reported by manufacturing establishments, total <sup>3</sup> .....	9,549	690	1,486	418	413	566	1,189	934	402	226	429	2,796
Salaried officers of corporations <sup>4</sup> .....	201	20	42	3	5	15	39	23	10	10	9	25
Manufacturing:												
Salaried employees <sup>5</sup> .....	1,040	60	224	15	29	52	119	144	48	30	39	280
Wage earners (average for the year) <sup>6</sup> .....	7,450	508	1,107	378	319	462	973	684	314	173	344	2,188
Distribution.....	766	102	93	22	54	33	57	61	23	11	36	274
Construction.....	84		15		6	4	1	22	4	2	1	29
Other.....	8		5					3				
Salaries and wages, total <sup>7</sup> .....	\$14,898,515	\$1,205,583	\$2,407,393	\$590,434	\$701,735	\$747,124	\$1,641,994	\$1,600,741	\$603,518	\$307,028	\$660,226	\$4,432,739
Salaried officers <sup>8</sup> .....	1,609,555	178,465	331,837	14,906	99,415	84,419	268,491	241,546	60,164	37,503	79,869	212,940
Manufacturing:												
Salaries <sup>9</sup> .....	2,091,888	127,042	427,222	27,920	59,311	88,598	224,839	267,194	89,923	55,396	69,792	654,651
Wages.....	9,384,260	670,431	1,406,135	501,010	383,756	515,428	1,041,165	908,901	367,590	195,235	451,441	2,943,168
Distribution.....	1,684,387	219,569	203,705	46,598	150,429	54,091	105,899	165,948	76,777	16,308	57,517	687,546
Construction.....	110,019		31,821		8,824	4,588	1,600	17,152	7,407	2,586	1,607	34,434
Other.....	18,406	10,076	6,673					1,657				
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	53,627,595	5,401,923	8,186,960	2,136,762	2,488,672	3,579,087	5,454,917	6,893,226	1,933,647	652,249	2,234,364	14,665,788
Materials, supplies, and containers.....	52,313,862	5,314,017	7,820,407	2,062,365	2,456,923	3,508,492	5,314,561	6,785,334	1,884,663	607,816	2,168,501	14,390,783
Fuel.....	526,662	23,765	127,901	50,692	3,811	12,248	70,607	54,574	16,079	19,970	41,831	105,284
Purchased electric energy.....	610,662	60,796	105,376	15,607	27,938	58,847	63,240	53,318	32,905	24,346	24,032	144,757
Contract work.....	176,409	3,845	133,276	8,198			6,509			117		24,964
Value of products.....	84,386,593	7,644,280	13,026,943	3,062,849	3,661,302	6,330,012	8,870,530	10,103,751	3,240,629	1,174,691	3,394,515	23,876,891
Value added by manufacture <sup>10</sup> .....	30,758,998	2,242,357	4,839,983	926,087	1,172,630	2,750,925	3,415,613	3,210,525	1,306,982	522,642	1,160,151	9,211,103

<sup>1</sup> Alabama, 1 establishment; California, 4; Connecticut, 2; Georgia, 1; Indiana, 1; Iowa, 1; Louisiana, 1; Maine, 1; Minnesota, 1; Nebraska, 1; New Hampshire, 1; Oregon, 2; Tennessee, 1; Texas, 3; Vermont, 2; Washington, 1.

<sup>2</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>3</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.

<sup>4</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>5</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

# COATED AND GLAZED PAPER

653

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Coated and Glazed Paper industry, all products, total value.....	\$84,386,593	\$78,522,258
Coated and glazed paper made in this industry.....	77,433,934	71,768,652
Miscellaneous products not classifiable.....	166,101	134,995
Other products (not classified in this industry).....	<sup>2</sup> 6,579,064	6,562,387
Receipts for contract and repair work.....	307,494	56,224
Coated and glazed paper, aggregate value.....	136,574,837	129,198,450
Coated and glazed paper made in this industry.....	77,433,934	71,768,652
Coated and glazed paper made as secondary products in other industries, total.....	59,140,903	57,429,798
Produced in other industries within the "Converted Paper Products" sub-group.....	7,872,468	(1)
Produced in the "Paper and paperboard mills" industry.....	50,781,915	
Produced in other industries outside the Paper and Allied Products group.....	486,520	

<sup>1</sup> Merchandise bought and sold in the same condition.

<sup>2</sup> Principally value of paper bags, boxes, converted cardboard, crepe paper, rolls, paper, and converted roofing paper.

<sup>3</sup> No data.

TABLE 4.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

	1939					1937
	Produced in the industry	Produced in other industries within the Converted Paper Products sub-group	Produced in the Paper and Paperboard Mills industry	Produced in other industries outside the Paper and Allied Products group	Aggregate	
Total value.....	\$77,433,934	\$7,872,468	\$50,781,915	<sup>1</sup> \$486,520	\$136,574,837	\$129,198,450
Coated book paper.....	10,816,379	393,011	26,769,474	—	37,978,864	43,731,242
Glazed and fancy paper.....	9,625,891	1,173,691	819,020	5,978	11,624,580	9,093,935
Waterproof wrapping paper.....	4,296,555	851,182	575,957	—	5,723,694	5,427,772
Waxed paper.....	36,919,629	3,218,963	17,264,480	—	57,403,072	53,394,544
Other coated.....	2,029,409	—	4,556,458	—	6,584,867	(2)
Cloth-lined paper.....	304,497	399,519	—	—	704,016	560,833
Gummed paper and tape:						
Gummed flat paper.....	2,274,258	1,107,626	528,450	354,405	4,264,739	4,657,015
Gummed paper tape.....	7,242,704	641,623	269,076	126,137	8,279,540	7,856,398
Gummed cloth tape.....	3,924,612	86,853	—	—	4,011,465	4,476,711

<sup>1</sup> Principally from "Cloth sponging and miscellaneous special finishing" and "Insecticides, fungicides, and related industrial and household chemical compounds" industries.

<sup>2</sup> No data.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939 AND 1937, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	7,450	7,170	7,226	7,247	7,186	7,161	7,208	7,235	7,292	7,556	7,995	8,085	8,033
1937.....	7,240	7,146	7,245	7,289	7,424	7,446	7,402	7,337	7,280	7,223	7,158	7,101	6,829
California.....	219	208	208	210	206	205	215	220	225	234	247	230	224
Illinois.....	508	503	509	502	502	503	508	503	508	509	506	519	528
Massachusetts.....	1,107	1,038	1,057	1,060	1,052	1,068	1,074	1,079	1,078	1,114	1,199	1,231	1,232
Michigan.....	378	362	370	376	362	350	362	364	374	399	422	403	406
Missouri.....	319	273	278	280	295	311	322	331	338	353	350	352	342
New Jersey.....	462	472	472	452	445	435	443	441	435	463	502	498	487
New York.....	973	970	969	970	932	914	932	920	901	965	1,056	1,090	1,053
Ohio.....	684	647	681	678	676	658	652	683	675	692	736	724	710
Pennsylvania.....	314	303	291	309	312	305	304	303	304	320	323	348	347
Rhode Island.....	173	172	169	171	170	175	173	168	175	177	176	177	178
Wisconsin.....	344	332	328	329	339	335	330	329	328	350	377	380	376

## CENSUS OF MANUFACTURES: 1939

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	140
Reporting expenditures for plant and equipment.....	95
Value of products:	
Total for the industry.....	\$84,386,593
Reporting expenditures for plant and equipment.....	69,986,175
Expenditures for plant and equipment:	
Total for the industry.....	1,719,206
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	318,596
Expenditures for new machinery and operating equipment.....	1,335,927
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	62,239
Expenditures unclassified.....	2,444

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$10,705,552	\$10,899,719
Finished products.....	3,775,220	3,818,926
Materials, supplies, etc.....	6,930,332	7,080,793
End of year, total.....	12,371,866	11,174,198
Finished products.....	3,916,845	4,121,274
Materials, supplies, etc.....	8,455,021	7,052,924
Value of products for the industry, total.....	84,386,593	78,522,258
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	83,550,054	75,882,655
Value for establishments not reporting inventories.....	836,539	2,639,603

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>

	1939		1939
Number of establishments.....	140	Prime movers—Continued.	
Number of establishments reporting power equipment.....	138	Prime movers, steam engines, not driving generators—	
Prime movers, aggregate:		Number.....	5
Number.....	34	Horsepower.....	663
Horsepower.....	9,097	Generators, kilowatt rating, total.....	5,908
Prime movers, driving generators, total—		Generators, driven by—	
Number.....	29	Steam engines, kilowatt rating.....	4,139
Horsepower.....	8,434	Steam turbines, kilowatt rating.....	150
Steam engines—		Diesel and semi-Diesel engines, kilowatt rating.....	274
Number.....	18	Other internal-combustion engines, <sup>2</sup> kilowatt rating.....	765
Horsepower.....	5,859	Hydroturbines and water wheels, kilowatt rating.....	580
Steam turbines—		Generators, ordinarily idle (included above), kilowatt rating.....	417
Number.....	1	Electric motors, total:	
Horsepower.....	200	Number.....	5,352
Diesel and semi-Diesel engines—		Horsepower.....	39,837
Number.....	2	Driven by purchased energy—	
Horsepower.....	430	Number.....	4,264
Other internal-combustion engines <sup>2</sup> —		Horsepower.....	31,542
Number.....	4	Driven by energy generated in establishments reporting—	
Horsepower.....	1,015	Number.....	1,088
Hydroturbines and water wheels—		Horsepower.....	8,295
Number.....	4	Electric energy (kilowatt-hours):	
Horsepower.....	930	Generated in plant.....	9,306,725
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	194	Sold.....	23,472
		Purchased.....	39,291,056

<sup>1</sup> Comparable data for 1929 not available.<sup>2</sup> Gas, gasoline, etc.

# ENVELOPES

[A preliminary report for this industry was issued November 23, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of paper envelopes of any description, including those made for filing, wrapping, etc.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1939

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work <sup>3</sup>	Value of products	Value added by manufacture <sup>4</sup>	Horsepower of prime movers
1939.....	169	8,689	\$9,596,844	\$24,623,014	\$50,118,134	\$25,495,120	3,139
1937.....	162	9,511	10,502,815	25,106,594	51,289,922	26,183,338	( <sup>5</sup> )
1935.....	166	9,038	9,086,718	20,900,441	43,618,372	22,717,931	( <sup>5</sup> )
1933.....	163	7,981	6,754,947	15,917,974	33,895,511	17,977,537	( <sup>5</sup> )
1931.....	162	8,924	9,658,173	22,452,160	46,943,261	24,491,101	( <sup>5</sup> )
1929.....	171	10,367	11,526,849	29,927,683	61,286,992	31,359,309	3,494
1927.....	153	9,745	10,754,636	28,973,192	56,006,225	27,033,033	3,036
1925.....	135	9,052	9,937,202	27,423,300	51,188,914	23,765,614	3,174
1923.....	132	9,241	9,525,054	27,527,875	50,751,558	23,223,683	3,340
1921.....	123	7,944	8,130,523	24,051,507	43,910,409	19,858,902	( <sup>5</sup> )
1919.....	106	8,129	6,649,939	21,964,743	39,664,077	17,699,334	3,001
1914.....	90	6,970	3,378,184	10,234,841	13,481,013	8,246,172	2,847
1909.....	78	5,303	2,226,187	7,566,996	13,453,522	5,886,526	( <sup>5</sup> )
1904.....	72	4,298	1,629,511	5,974,948	10,222,366	4,247,418	1,427
1899.....	51	2,984	1,150,463	3,665,275	6,299,330	2,634,055	1,230

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Figures for years prior to 1935 do not include cost of contract work.

<sup>4</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>5</sup> Not called for on schedule.

<sup>6</sup> Data not available.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	California	Illinois	Maryland	Massachusetts	Michigan	Minnesota	Missouri	New York	Ohio	Pennsylvania	Other States <sup>1</sup>
Number of establishments <sup>2</sup> .....	169	11	22	4	15	5	9	8	38	10	14	33
Proprietors and firm members.....	41	10	3				3		8		6	11
Persons reported by manufacturing establishments, total <sup>3</sup> .....	11,161	462	1,616	215	2,065	320	297	657	1,991	1,334	669	1,545
Salaried officers of corporations <sup>4</sup> .....	257	14	38	11	25	9	7	17	58	17	22	39
Manufacturing:												
Salaried employees <sup>5</sup> .....	826	44	102	13	166	23	17	37	148	92	67	117
Wage earners (average for the year) <sup>6</sup> .....	8,689	331	1,214	165	1,809	225	223	488	1,534	1,175	506	1,218
Distribution.....	1,289	57	246	26	214	62	50	115	243	48	74	154
Construction.....	75	5	16		27				8	2		17
Other.....	25	1			24							
Salaries and wages, total <sup>7</sup> .....	\$15,826,508	\$688,115	\$2,391,533	\$290,833	\$2,737,652	\$541,678	\$437,627	\$990,116	\$3,040,326	\$1,714,093	\$872,135	\$2,122,400
Salaried officers <sup>8</sup> .....	1,621,032	50,967	259,288	80,290	95,643	71,070	36,517	118,724	410,650	130,906	131,445	235,523
Manufacturing:												
Salaries <sup>9</sup> .....	1,777,199	104,409	242,235	20,825	403,793	55,798	35,026	81,325	241,920	186,300	116,812	284,256
Wages.....	9,596,844	403,409	1,393,700	154,258	1,788,434	286,337	245,011	538,090	1,754,766	1,280,380	487,748	1,264,711
Distribution.....	2,652,170	119,315	459,130	35,451	369,580	128,473	121,073	251,977	609,261	112,466	136,630	308,814
Construction.....	150,088	8,537	37,180		47,505				23,729	4,041		29,096
Other.....	29,175	1,478			27,697							
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	24,623,014	911,225	3,607,054	724,058	4,754,112	690,365	613,122	1,347,995	4,414,030	3,397,860	1,049,636	3,113,557
Materials, supplies, and containers.....	23,966,746	885,275	3,456,118	711,019	4,667,946	666,676	597,933	1,290,175	4,277,120	3,353,720	1,019,410	3,041,354
Fuel.....	145,235	2,604	26,045	1,764	45,372	6,418	4,424	2,958	10,790	20,889	5,719	18,252
Purchased electric energy.....	339,427	11,629	67,116	11,275	31,864	11,730	10,765	20,932	91,050	23,251	18,348	41,467
Contract work.....	171,606	11,717	57,775		8,930	5,641		33,930	35,070		6,159	12,484
Value of products.....	50,118,134	1,963,648	7,508,836	1,196,691	9,479,111	1,570,768	1,294,477	2,884,476	9,001,934	6,154,333	2,385,801	6,678,059
Value added by manufacture <sup>10</sup> .....	25,495,120	1,052,423	3,901,782	472,633	4,724,999	880,403	681,355	1,536,481	4,587,904	2,755,473	1,336,165	3,564,502

<sup>1</sup> Colorado, 1 establishment; Connecticut, 2; District of Columbia, 1; Georgia, 2; Indiana, 3; Iowa, 1; Kentucky, 2; Louisiana, 1; Nebraska, 2; New Jersey, 1; Oklahoma, 1; Oregon, 1; Tennessee, 1; Texas, 5; Virginia, 2; Washington, 3; Wisconsin, 4.

<sup>2</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>3</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.

<sup>4</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>5</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

## CENSUS OF MANUFACTURES: 1939

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Envelopes industry, all products, total value.....	\$50, 118, 134	\$51, 289, 922
Envelopes made in this industry.....	47, 337, 347	46, 265, 140
Miscellaneous products not classifiable.....	176, 984	176, 314
Other products (not classified in this industry).....	* 2, 542, 639	4, 488, 314
Receipts for contract and repair work.....	161, 164	360, 154
Envelopes, aggregate value.....	50, 194, 653	48, 523, 793
Envelopes made in this industry.....	47, 337, 347	46, 265, 140
Envelopes made as secondary products in other industries, total.....	2, 857, 306	2, 258, 653
Made in other industries within the "Converted paper products" subgroup.....	2, 824, 525	} (*)
Made in other industries outside the Paper and Allied Products group.....	* 32, 781	

<sup>1</sup> Includes the value of waste, scrap, and merchandise bought and sold in same condition.

<sup>2</sup> Principally the value of other converted paper products, such as bags, boxes, cups, and tablets.

<sup>3</sup> No data.

<sup>4</sup> Principally from the "Printing, publishing, and allied industries" group.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

No detailed production figures are collected for this industry.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939, 1937, AND 1929, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	8,689	8,547	8,623	8,663	8,648	8,630	8,550	8,453	8,571	8,683	8,852	9,101	8,950
1937.....	9,511	9,312	9,535	9,681	9,735	9,697	9,609	9,500	9,457	9,458	9,422	9,399	9,332
1929.....	10,367	10,031	10,177	10,291	10,404	10,363	10,350	10,299	10,320	10,461	10,598	10,573	10,536
California.....	331	344	350	338	338	348	334	335	344	329	355	347	212
Illinois.....	1,214	1,177	1,205	1,223	1,232	1,214	1,218	1,196	1,191	1,199	1,219	1,250	1,243
Indiana.....	143	142	135	146	145	140	140	144	143	145	144	146	147
Maryland.....	165	160	158	163	158	162	160	159	164	171	175	176	178
Massachusetts.....	1,609	1,598	1,604	1,587	1,602	1,591	1,567	1,539	1,545	1,595	1,656	1,738	1,685
Michigan.....	226	215	231	226	230	218	212	219	216	242	231	234	232
Minnesota.....	223	225	228	228	226	228	215	211	210	216	217	225	225
Missouri.....	458	455	485	486	455	479	481	479	492	505	508	511	518
New York.....	1,534	1,525	1,533	1,550	1,538	1,528	1,504	1,474	1,506	1,517	1,552	1,594	1,592
Ohio.....	1,175	1,145	1,152	1,160	1,180	1,174	1,165	1,161	1,164	1,167	1,186	1,213	1,229
Pennsylvania.....	506	493	495	510	499	500	501	490	503	505	497	538	539
Texas.....	69	64	66	67	67	69	68	68	72	70	71	75	73
Washington.....	29	33	33	34	32	32	32	33	25	24	25	25	25
Wisconsin.....	107	103	102	105	104	106	107	107	111	109	107	108	112

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	169
Reporting expenditures for plant and equipment.....	109
Value of products:	
Total for the industry.....	\$50,118,134
Reporting expenditures for plant and equipment.....	42,006,947
Expenditures for plant and equipment:	
Total for the industry.....	1,250,274
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	251,123
Expenditures for new machinery and operating equipment.....	843,246
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	155,905

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$6,725,367	\$7,210,751
Finished products.....	2,396,385	2,763,482
Materials, supplies, etc.....	4,328,982	4,447,269
End of year, total.....	8,087,302	8,000,020
Finished products.....	2,543,234	3,055,237
Materials, supplies, etc.....	5,544,068	5,034,783
Value of products for the industry, total.....	50,118,134	51,289,922
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	49,388,654	50,175,204
Value for establishments not reporting inventories.....	729,480	1,114,718

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929

	1939	1929
Number of establishments.....	169	171
Number of establishments reporting power equipment.....	168	167
Prime movers, aggregate:		
Number.....	18	30
Horsepower.....	3,139	3,494
Prime movers, driving generators, total—		
Number.....	14	130
Horsepower.....	2,834	13,404
Steam engines—		
Number.....	9	124
Horsepower.....	2,007	12,989
Steam turbines—		
Number.....		11
Horsepower.....		150
Diesel and semi-Diesel engines—		
Number.....	4	
Horsepower.....	717	13
Other internal-combustion engines <sup>1</sup> —		
Number.....		1160
Horsepower.....		
Hydroturbines and water wheels—		
Number.....	1	12
Horsepower.....	110	1295
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	325	
Prime movers not driving generators, total—		
Number.....	4	
Horsepower.....	305	
Steam engines—		
Number.....	3	
Horsepower.....	255	

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929—Continued

	1939	1929
Prime movers—Continued.		
Prime movers not driving generators—Continued.		
Steam turbines—		
Number.....	1	( <sup>2</sup> )
Horsepower.....	50	
Generators, kilowatt rating, total.....	1,007	2,204
Generators, driven by—		
Steam engines, kilowatt rating.....	1,430	
Diesel and semi-Diesel engines, kilowatt rating.....	457	( <sup>2</sup> )
Hydroturbines and water wheels, kilowatt rating.....	20	
Generators, ordinarily idle (included above), kilowatt rating.....	200	( <sup>4</sup> )
Electric motors, total:		
Number.....	8,758	7,405
Horsepower.....	14,177	13,037
Driven by purchased energy—		
Number.....	7,543	5,589
Horsepower.....	11,960	9,583
Driven by energy generated in establishments reporting—		
Number.....	1,215	1,816
Horsepower.....	2,217	3,454
Electric energy (kilowatt-hours):		
Generated in plant.....	2,762,859	( <sup>4</sup> )
Sold.....	30,732	( <sup>2</sup> )
Purchased.....	11,754,605	9,488,111

<sup>1</sup> Includes data for prime movers not driving generators.

<sup>2</sup> Gas, gasoline, etc.

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Data not available.

# PAPER BAGS, EXCEPT THOSE MADE IN PAPER MILLS

[A preliminary report for this industry was issued December 10, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of paper bags of any description. Bags made of cellophane are included in the "Fabricated plastic products, not elsewhere classified" industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1939

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work <sup>3</sup>	Value of products	Value added by manufacture <sup>4</sup>	Horsepower of prime movers
1939.....	119	11,081	\$10,628,601	\$53,964,442	\$85,776,374	\$31,811,932	2,837
1937.....	107	10,360	9,849,896	53,423,931	82,458,263	29,034,332	(9)
1935.....	107	9,120	8,037,966	41,766,195	65,568,696	23,797,501	(9)
1933.....	96	7,665	5,812,998	29,295,537	49,379,367	20,083,830	(9)
1931.....	95	6,836	6,422,669	33,426,725	54,290,800	20,804,075	(9)
1929.....	95	6,970	6,661,235	43,238,392	64,621,192	21,382,800	1,048
1927.....	88	6,463	6,393,075	40,734,599	57,489,652	16,755,058	1,190
1925.....	66	5,585	5,523,708	29,956,962	45,977,902	16,020,940	1,158
1923.....	64	4,086	4,536,991	29,375,224	42,272,470	12,897,240	(9)
1921.....	57	3,707	3,475,487	29,797,291	41,190,179	11,392,888	(9)
1919.....	75	4,188	3,662,830	33,350,481	47,263,990	13,913,509	1,642
1914.....	59	3,505	1,659,070	12,200,884	17,692,543	5,401,659	1,873
1909.....	74	3,212	1,306,342	10,354,592	15,697,959	5,343,367	2,306
1904.....	62	2,473	930,171	6,594,976	10,086,863	3,491,887	1,891
1899.....	63	1,989	628,033	4,499,416	6,799,425	2,300,009	1,803

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Figures for years prior to 1935 do not include cost of contract work.

<sup>4</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>5</sup> Not called for on schedule.

<sup>6</sup> Data not available.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	Alabama	California	Illinois	Louisiana	Maryland	Massachusetts	New Jersey	New York	Ohio	Pennsylvania	Virginia	Other States <sup>1</sup>
Number of establishments <sup>2</sup> .....	119	3	9	9	5	3	6	6	27	11	9	7	24
Proprietors and firm members.....	19			2	1		3		7		5		1
Persons reported by manufacturing establishments, total <sup>3</sup> .....	12,703	1,153	352	1,007	1,034	112	520	269	3,063	1,136	1,199	603	2,255
Salaried officers of corporations <sup>4</sup> .....	140	2	6	12	3	4	5	7	33	23	11	8	26
Manufacturing:													
Salaried employees <sup>5</sup> .....	896	48	46	83	94	17	47	26	175	86	83	40	151
Wage earners (average for the year) <sup>6</sup> .....	11,081	1,101	282	843	926	87	455	210	2,685	959	1,012	518	2,003
Distribution.....	509	2	15	66	11	4	13	26	126	68	76	37	65
Construction.....	67		3	3					44		17		
Other.....	10												10
Salaries and wages, total <sup>7</sup> .....	\$14,933,981	\$1,141,853	\$400,954	\$1,346,487	\$972,805	\$133,617	\$625,176	\$407,276	\$3,946,370	\$1,554,741	\$1,564,466	\$552,505	\$2,287,731
Salaried officers <sup>8</sup> .....	1,332,305	21,600	26,009	100,742	41,800	26,110	60,333	79,099	368,632	164,105	203,620	73,800	100,455
Manufacturing:													
Salaries <sup>9</sup> .....	1,673,734	97,476	65,737	153,310	144,393	28,286	75,964	73,583	353,927	163,894	187,203	66,526	203,435
Wages.....	10,628,601	1,007,777	280,440	913,387	732,484	72,332	459,296	177,237	2,893,723	1,050,222	1,003,751	366,000	1,671,952
Distribution.....	1,154,183	15,000	25,019	173,321	54,128	6,889	29,583	77,357	263,438	176,520	116,110	46,179	170,639
Construction.....	129,908		3,749	5,727					66,650		53,782		
Other.....	15,250												15,250
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	\$3,964,442	\$6,110,410	\$1,784,180	\$3,496,700	\$3,702,645	\$310,339	\$1,986,978	\$1,057,372	\$14,304,508	\$5,601,043	\$4,391,502	\$1,964,912	\$9,253,853
Materials, supplies, and containers.....	\$3,171,074	\$6,081,294	\$1,772,511	\$3,375,160	\$3,681,257	\$303,210	\$1,963,346	\$1,040,549	\$14,129,837	\$5,541,697	\$4,337,886	\$1,937,972	\$9,006,355
Fuel.....	136,331	5,136	1,179	12,388	7,086	740	6,116	5,719	37,619	22,181	17,057	7,980	13,130
Purchased electric energy.....	346,743	23,980	10,490	38,378	14,302	6,389	17,280	11,104	93,156	37,165	36,559	18,960	38,080
Contract work.....	310,294			70,774			236		43,896				105,388
Value of products.....	\$85,776,374	\$7,905,311	\$2,829,174	\$5,833,900	\$5,744,167	\$620,413	\$3,773,294	\$1,911,497	\$23,040,261	\$8,121,086	\$7,915,090	\$2,766,862	\$15,315,319
Value added by manufacture <sup>10</sup> .....	\$31,811,932	\$1,794,901	\$1,044,994	\$2,337,200	\$2,041,522	\$310,074	\$1,786,316	\$854,125	\$8,735,753	\$2,520,043	\$3,523,588	\$801,950	\$6,061,406

<sup>1</sup> Arkansas, 2 establishments; Georgia, 2; Indiana, 2; Kentucky, 1; Mississippi, 1; Missouri, 4; North Carolina, 1; Oregon, 1; South Carolina, 1; Tennessee, 1; Texas, 2; Vermont, 2; Washington, 2; Wisconsin, 2.

<sup>2</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>3</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.

<sup>4</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>5</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Paper Bags, Except Those Made in Paper Mills industry, all products, total value...	\$85,776,374	\$82,458,263
Paper bags made in this industry.....	78,111,033	78,756,179
Miscellaneous products not classifiable.....	<sup>1</sup> 878,958	3,674,896
Other products (not classified in this industry).....	<sup>2</sup> 6,786,383	27,188
Receipts for contract and repair work.....		
Paper bags, aggregate value.....	96,570,838	97,483,720
Paper bags made in this industry.....	78,111,033	78,756,179
Paper bags made as secondary products in other industries, total.....	18,459,805	18,727,541
Made in other industries within the "Converted paper products" subgroup.....	5,932,395	(3)
Made in the "Paper and paperboard mills" industry.....	6,755,007	
Made in other industries outside the Paper and Allied Products group.....	5,772,403	

<sup>1</sup> Principally value of merchandise bought and sold in same condition.<sup>2</sup> Principally value of other converted paper products such as cloth-lined paper, envelopes, twisted paper (cord, twine, etc.), and waterproof wrapping paper.<sup>3</sup> No data.

TABLE 4.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

	1939					1937
	Produced in the industry	Produced in other industries within the Converted Paper Products subgroup	Produced in the Paper and Paperboard Mills industry	Produced in other industries outside the Paper and Allied Products group	Aggregate	
Total value.....	\$78,111,033	\$5,932,395	\$6,755,007	<sup>1</sup> \$5,772,403	\$96,570,838	\$97,483,720
Bags, paper <sup>2</sup> :						
Kraft.....	66,927,833	3,825,807	5,129,774	3,000	75,886,414	79,061,203
Glassine.....	3,790,859	1,551,830	158,484	20,150	5,520,823	5,628,499
Other.....	7,392,841	554,758	1,466,749	5,749,253	15,163,601	12,794,018

<sup>1</sup> Principally from "Textile bags—not made in textile mills" industry.<sup>2</sup> In addition, bags are made to some extent of transparent sheets of plastic materials (cellulose, etc.), which are classified as products of the "Fabricated plastic products, not elsewhere classified" industry.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939, 1937, AND 1929, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	11,081	10,440	10,287	10,758	10,592	10,500	10,511	10,813	11,019	11,725	12,180	12,142	12,005
1937.....	10,360	10,387	10,600	10,802	10,957	10,825	10,785	10,538	10,456	10,308	10,139	9,517	9,003
1929.....	6,970	6,550	6,840	7,136	7,295	7,098	7,072	6,998	6,979	6,930	7,125	6,931	6,687
Alabama.....	1,101	996	828	1,067	881	820	906	1,108	1,249	1,371	1,360	1,312	1,309
California.....	282	202	271	283	262	277	271	271	268	276	315	314	311
Illinois.....	843	799	821	890	873	847	824	827	785	807	850	894	895
Louisiana.....	926	905	876	923	912	902	890	884	925	966	959	939	975
Maryland.....	87	87	71	81	77	78	79	81	85	100	105	100	105
Massachusetts.....	455	416	434	450	436	428	435	446	461	483	488	497	487
Missouri.....	189	187	214	216	165	165	168	157	153	187	214	230	215
New Jersey.....	210	171	178	176	187	206	203	227	244	238	243	227	218
New York.....	2,685	2,492	2,532	2,604	2,651	2,646	2,573	2,609	2,643	2,739	2,901	2,927	2,898
Ohio.....	959	878	899	908	951	948	944	907	886	955	1,071	1,091	1,072
Pennsylvania.....	1,012	1,009	994	995	999	1,000	1,002	992	988	1,020	1,030	1,059	1,051
Virginia.....	518	409	414	418	430	422	450	497	540	659	687	618	675



## CENSUS OF MANUFACTURES: 1939

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	119
Reporting expenditures for plant and equipment.....	87
Value of products:	
Total for the industry.....	\$85,776,374
Reporting expenditures for plant and equipment.....	75,603,132
Expenditures for plant and equipment:	
Total for the industry.....	1,966,326
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	616,819
Expenditures for new machinery and operating equipment.....	1,209,900
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	139,253
Expenditures unclassified.....	354

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$8,259,153	\$8,654,960
Finished products.....	3,625,158	3,476,191
Materials, supplies, etc.....	4,633,995	5,178,769
End of year, total.....	9,528,769	10,537,773
Finished products.....	3,965,084	4,507,588
Materials, supplies, etc.....	5,563,685	6,030,185
Value of products for the industry, total.....	85,776,374	82,458,263
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	85,491,533	82,040,959
Value for establishments not reporting inventories.....	284,841	417,304

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929

	1939	1929
Number of establishments.....	119	95
Number of establishments reporting power equipment.....	118	93
Prime movers, aggregate:		
Number.....	21	11
Horsepower.....	2,837	1,048
Prime movers, driving generators, total—		
Number.....	12	11
Horsepower.....	1,580	1,048
Steam engines—		
Number.....	5	18
Horsepower.....	645	1,810
Steam turbines—		
Number.....	1	1
Horsepower.....	250	150
Diesel and semi-Diesel engines—		
Number.....		
Horsepower.....		12
Other internal-combustion engines <sup>1</sup> —		
Number.....		188
Horsepower.....		
Hydroturbines and water wheels—		
Number.....	6	
Horsepower.....	685	
Prime movers not driving generators, total—		
Number.....	9	
Horsepower.....	1,257	
Steam engines—		
Number.....	3	
Horsepower.....	113	

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929—Continued

	1939	1929
Prime movers—Continued.		
Prime movers not driving generators—Continued.		
Hydroturbines and water wheels—		
Number.....	6	( <sup>4</sup> )
Horsepower.....	1,144	
Generators, kilowatt rating, total.....	1,048	305
Generators, driven by—		
Steam engines, kilowatt rating.....	433	
Steam turbines, kilowatt rating.....	177	( <sup>4</sup> )
Hydroturbines and water wheels, kilowatt rating.....	438	
Electric motors, total:		
Number.....	6,679	3,437
Horsepower.....	19,933	12,756
Driven by purchased energy—		
Number.....	5,992	3,250
Horsepower.....	17,173	12,368
Driven by energy generated in establishments reporting—		
Number.....	687	187
Horsepower.....	2,760	388
Electric energy (kilowatt-hours):		
Generated in plant.....	4,164,402	( <sup>4</sup> )
Sold.....	140,126	( <sup>4</sup> )
Purchased.....	20,461,388	16,746,494

<sup>1</sup> Includes data for prime movers not driving generators.<sup>2</sup> Gas, gasoline, etc.<sup>3</sup> Not called for on schedule.<sup>4</sup> Data not available.

# FIBER CANS, TUBES, AND SIMILAR PRODUCTS

[A preliminary report for this industry was issued December 31, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of fiber cans, cones, mailing cases, tubes, and similar products, such as cores, and ribbon blocks and spools with or without metal ends.

**Statistics for prior census years.**—This industry was first established as a separate classification at the

census for 1939. The statistics for 1937 were a part of the former industries "Boxes, paper, not elsewhere classified" and "Synthetic-resin, cellulose-plastic, vulcanized-fiber, and molded and pressed pulp fabricated articles, not elsewhere classified." A retabulation was made of the 1937 statistics to obtain figures comparable with those for 1939. No revisions were made, however, in the statistics for earlier years.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1939 AND 1937

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work	Value of products	Value added by manufacture <sup>3</sup>	Horsepower of prime movers
1939.....	116	6,637	\$6,962,529	\$13,952,397	\$33,345,334	\$19,392,937	6,508
1937 <sup>4</sup> .....	100	6,104	6,347,064	14,088,679	32,791,570	18,702,891	( <sup>5</sup> )

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>4</sup> No comparable data for years prior to 1937.

<sup>5</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	Delaware	Massachusetts	Michigan	New Jersey	New York	Ohio	Pennsylvania	Rhode Island	Other States <sup>1</sup>
Number of establishments <sup>2</sup> .....	116	7	12	6	14	21	9	12	5	30
Proprietors and firm members.....	40	-----	2	5	5	6	1	6	6	9
Persons reported by manufacturing establishments, total <sup>3</sup> .....	7,790	512	571	156	1,241	1,802	379	288	353	2,488
Salaried officers of corporations <sup>3</sup> .....	109	7	16	1	19	22	12	11	5	16
Manufacturing:										
Salaried employees <sup>3</sup> .....	655	52	44	15	147	110	23	16	34	214
Wage earners (average for the year) <sup>4</sup> .....	6,637	437	499	133	1,050	1,466	317	249	310	2,176
Distribution.....	372	16	11	6	21	204	27	12	4	71
Construction.....	8	-----	-----	-----	4	-----	-----	-----	-----	4
Other.....	9	-----	1	1	-----	-----	-----	-----	-----	7
Salaries and wages, total <sup>5</sup> .....	\$9,657,697	\$698,423	\$594,957	\$175,931	\$1,578,232	\$2,686,382	\$474,225	\$334,395	\$398,000	\$2,717,152
Salaried officers <sup>3</sup> .....	547,706	40,988	59,306	5,600	59,187	125,191	93,266	31,406	40,318	92,444
Manufacturing:										
Salaries <sup>3</sup> .....	1,272,200	95,625	66,782	26,790	261,983	249,286	39,325	39,591	48,359	444,459
Wages.....	6,962,529	530,524	445,363	132,022	1,214,442	1,826,241	302,166	230,088	299,798	1,972,885
Distribution.....	849,550	31,286	22,362	11,206	35,102	485,664	39,468	24,310	9,525	190,627
Construction.....	16,157	-----	-----	-----	7,518	-----	-----	-----	-----	8,639
Other.....	9,555	-----	1,144	313	-----	-----	-----	-----	-----	8,098
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	13,952,397	782,435	766,907	338,971	2,829,828	4,097,971	568,681	635,653	308,798	3,623,153
Materials, supplies, and containers.....	13,210,251	653,612	703,556	335,857	2,679,082	3,950,206	527,450	618,570	286,230	3,455,688
Fuel.....	464,672	107,151	46,734	461	97,374	88,748	1,791	7,309	10,245	104,859
Purchased electric energy.....	247,613	21,672	14,740	2,553	53,372	59,017	11,456	9,774	12,323	62,606
Contract work.....	29,861	-----	1,877	-----	-----	-----	27,984	-----	-----	-----
Value of products.....	33,345,334	1,894,309	1,742,860	733,453	6,454,288	9,707,959	1,424,656	1,477,822	894,157	9,015,830
Value added by manufacture <sup>5</sup> .....	19,392,937	1,111,874	975,953	394,482	3,624,460	5,609,988	855,975	842,169	585,369	5,392,677

<sup>1</sup> California, 1 establishment; Connecticut, 2; District of Columbia, 1; Georgia, 1; Illinois, 7; Indiana, 1; Kentucky, 1; Louisiana, 1; Maine, 1; Maryland, 1; Minnesota, 1; Missouri, 4; New Hampshire, 1; North Carolina, 2; South Carolina, 1; Tennessee, 1; Vermont, 1; Wisconsin, 2.

<sup>2</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>3</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.

<sup>4</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>5</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

## CENSUS OF MANUFACTURES: 1939

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Fiber Cans, Tubes, and Similar Products industry, all products, total value.....	\$33,345,334	\$32,791,570
Fiber cans, tubes, and similar products made in this industry.....	28,367,887	25,907,577
Miscellaneous products not classifiable.....	1,116	6,883,993
Other products (not classified in this industry).....	4,976,331	
Fiber cans, tubes, and similar products, aggregate value.....	34,123,565	35,852,204
Fiber cans, tubes, and similar products made in this industry.....	28,367,887	25,907,577
Fiber cans, tubes, and similar products made as secondary products in other industries, total.....	5,755,678	9,944,627
Made in other industries within the "Converted paper products" subgroup..	2,151,883	(2)
Made in the "Paper and paperboard mills" industry.....	886,348	
Made in other industries outside the Paper and Allied Products group.....	2,717,447	

<sup>1</sup> Principally value of bottle caps, boxes and containers made of paper, and laminated sheets, rods, plates, etc., made of plastics.

<sup>2</sup> No data.

TABLE 4.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

PRODUCT	1939					1937
	Produced in the industry	Produced in other industries within the Converted Paper Products subgroup	Produced in the Paper and Paperboard Mills industry	Produced in other industries outside the Paper and Allied Products group	Aggregate	
Total value.....	\$28,367,887	\$2,151,883	\$886,348	<sup>1</sup> \$2,717,447	\$34,123,565	\$35,852,204
Fiber and fiber and metal combination:						
Bottles.....	762,501	102,042			864,543	17,764,951
Cans.....	12,006,079	1,427,800	803,831	567,829	14,805,539	
Drums and mailing cases.....	782,241	157,610			939,851	(2)
Tubes and cores.....	5,954,272	431,528	82,517		6,468,317	6,407,833
Bobbins, reels, ribbon blocks, spools, etc., fiber.....	808,375	31,659			840,034	(2)
Cones, fiber.....	2,733,537	1,244			2,734,781	(2)
Vulcanized fiber:						
Rods, tubes, and other unfinished forms.....	2,069,366			621,403	2,690,769	2,948,657
Laminated sheets and plates.....	1,661,227			1,242,425	2,903,652	4,767,728
Hollow ware (boxes, cans, pails, etc.).....	1,272,003			176,512	1,448,515	2,044,259
Other vulcanizing fiber.....	318,286			109,278	427,564	1,918,776

<sup>1</sup> Principally from the "Fabricated plastic products, not elsewhere classified" and the "Tin cans and other tinware, not elsewhere classified" industries.

<sup>2</sup> Not called for on schedule.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939 AND 1937, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	6,637	6,237	6,275	6,398	6,398	6,327	6,383	6,478	6,564	6,675	7,240	7,444	7,220
1937.....	6,104	5,864	6,031	6,180	6,455	6,738	6,818	6,334	6,220	5,970	5,883	5,553	5,200
Delaware.....	437	409	407	410	413	417	415	422	417	423	485	512	519
Illinois.....	428	366	375	378	392	410	427	423	463	453	503	498	444
Massachusetts.....	499	487	467	503	507	488	486	500	485	510	574	498	494
Michigan.....	133	130	128	128	130	125	130	125	133	139	145	143	144
Missouri.....	285	249	268	269	273	265	278	295	297	291	310	327	308
New Jersey.....	1,050	1,021	1,046	1,028	1,014	995	1,012	1,029	1,028	1,047	1,109	1,186	1,085
New York.....	1,466	1,322	1,340	1,411	1,415	1,415	1,414	1,436	1,460	1,408	1,623	1,647	1,639
Ohio.....	317	288	285	302	305	301	299	298	308	313	359	385	359
Pennsylvania.....	249	241	228	237	232	229	237	241	242	246	269	286	301
Rhode Island.....	310	286	287	284	273	271	277	272	285	319	346	420	400

## FIBER CANS, TUBES, AND SIMILAR PRODUCTS

663

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry	116
Reporting expenditures for plant and equipment	81
Value of products:	
Total for the industry	\$33,345,334
Reporting expenditures for plant and equipment	27,544,092
Expenditures for plant and equipment:	
Total for the industry	985,589
Expenditures for new construction or major alterations of buildings and other fixed plant and structures	89,240
Expenditures for new machinery and operating equipment	896,416
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land	59,933

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total	\$4,586,452	\$4,714,825
Finished products	1,973,258	2,356,864
Materials, supplies, etc.	2,613,194	2,357,961
End of year, total	5,066,476	5,843,471
Finished products	1,827,962	2,708,710
Materials, supplies, etc.	3,238,514	3,134,761
Value of products for the industry, total	33,345,334	32,791,570
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand)	29,827,662	32,629,359
Value for establishments not reporting inventories	3,517,672	262,211

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>

	1939
Number of establishments	116
Number of establishments reporting power equipment	116
Prime movers, aggregate:	
Number	21
Horsepower	6,508
Prime movers, driving generators, total—	
Number	13
Horsepower	5,977
Steam engines—	
Number	6
Horsepower	1,700
Steam turbines—	
Number	4
Horsepower	4,162
Diesel and semi-Diesel engines—	
Number	1
Horsepower	60
Other internal-combustion engines <sup>2</sup> —	
Number	1
Horsepower	15
Hydroturbines and water wheels—	
Number	1
Horsepower	40
Prime movers, driving generators, ordinarily idle (included above), horsepower	700
Prime movers not driving generators, total—	
Number	8
Horsepower	531
Steam engines—	
Number	6
Horsepower	491

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>—Continued

	1939
Prime movers—Continued.	
Prime movers not driving generators—Continued.	
Other internal-combustion engines <sup>2</sup> —	
Number	1
Horsepower	20
Hydroturbines and water wheels—	
Number	1
Horsepower	20
Prime movers not driving generators, ordinarily idle (included above), horsepower	128
Generators, kilowatt rating, total	4,372
Generators, driven by—	
Steam engines, kilowatt rating	1,200
Steam turbines, kilowatt rating	3,100
Diesel and semi-Diesel engines, kilowatt rating	32
Other internal-combustion engines, <sup>2</sup> kilowatt rating	10
Hydroturbines and water wheels, kilowatt rating	30
Generators, ordinarily idle (included above), kilowatt rating	550
Electric motors, total:	
Number	5,350
Horsepower	24,201
Driven by purchased energy—	
Number	4,149
Horsepower	15,990
Driven by energy generated in establishments reporting—	
Number	1,201
Horsepower	8,211
Electric energy (kilowatt-hours):	
Generated in plant	12,357,412
Sold	14,376
Purchased	17,382,947

<sup>1</sup> Comparable data for 1929 not available.<sup>2</sup> Gas, gasoline, etc.

# PAPERBOARD CONTAINERS AND BOXES NOT ELSEWHERE CLASSIFIED

[A preliminary report for this industry was issued December 30, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of folding and set-up boxes; corrugated and solid-fiber shipping containers; decorated, lithographed, lacquered, and fancy-covered paper boxes, and other paper and paperboard boxes and containers.

**Statistics for prior census years.**—This industry was established as a separate classification at the census for 1939. The figures for 1937 were subtracted from statistics for the former industry "Boxes, paper, not elsewhere classified" and are comparable with the figures for 1939. There are, however, no comparable figures for earlier years.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1939 AND 1937

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work	Value of products	Value added by manufacture <sup>3</sup>	Horse-power of prime movers
1939.....	1,338	62,530	\$63,806,013	\$213,838,608	\$382,709,595	\$168,870,987	8,354
1937 <sup>4</sup> .....	1,226	62,620	63,300,758	231,410,226	394,786,932	163,376,706	( <sup>5</sup> )

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>4</sup> No comparable figures for years prior to 1937.

<sup>5</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	Arkansas	California	Colorado	Connecticut	Florida	Georgia	Illinois	Indiana	Iowa	Kansas	Kentucky
Number of establishments <sup>1</sup> .....	1,338	3	54	7	41	5	15	119	32	12	6	6
Proprietors and firm members.....	497	—	24	1	8	—	2	49	4	5	4	—
Persons reported by manufacturing establishments, total <sup>2</sup> .....	75,376	128	2,357	166	2,385	117	805	7,421	3,095	336	608	275
Salaried officers of corporations <sup>3</sup> .....	1,763	6	57	8	59	7	15	164	50	18	3	6
Manufacturing:												
Salaried employees <sup>3</sup> .....	5,845	11	184	20	183	8	100	585	334	28	68	29
Wage earners (average for the year) <sup>2</sup> .....	62,530	102	1,907	121	2,003	96	521	6,106	2,419	268	487	227
Distribution.....	4,852	9	205	15	140	4	159	524	283	22	38	12
Construction.....	326	—	2	2	—	2	10	42	8	—	10	1
Other.....	60	—	2	—	—	—	—	10	1	—	2	—
Salaries and wages, total <sup>2</sup> .....	\$95,873,427	\$126,454	\$3,566,996	\$213,327	\$3,172,620	\$82,299	\$881,512	\$9,595,521	\$3,851,957	\$368,957	\$728,460	\$398,629
Salaried officers <sup>3</sup> .....	10,841,974	25,780	334,319	38,506	374,425	7,611	106,000	1,124,400	314,420	80,679	27,750	74,512
Manufacturing:												
Salaries <sup>3</sup> .....	10,749,106	15,335	381,950	25,847	368,128	12,262	131,418	1,070,435	535,706	38,202	99,119	61,391
Wages.....	63,806,013	72,752	2,387,372	119,402	2,118,520	53,724	382,825	6,220,837	2,519,265	210,394	504,370	218,004
Distribution.....	9,930,874	12,687	459,708	26,548	311,547	7,173	250,404	1,087,730	479,119	36,772	83,858	41,760
Construction.....	434,830	—	3,321	3,024	—	1,529	10,865	78,789	2,283	2,850	10,546	2,362
Other.....	110,630	—	326	—	—	—	—	13,270	1,155	—	2,811	—
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	213,838,608	282,924	8,185,711	417,692	5,438,188	469,734	2,789,588	22,044,799	10,430,218	991,941	2,327,834	953,558
Materials, supplies, and containers.....	209,725,722	278,140	8,074,274	409,306	5,298,777	467,574	2,755,852	21,670,988	10,238,406	970,085	2,300,835	934,482
Fuel.....	1,511,853	1,500	24,890	3,117	66,726	—	18,102	136,979	90,321	6,881	12,949	8,156
Purchased electric energy.....	2,013,602	3,284	57,234	5,269	45,185	2,160	15,634	210,692	91,410	10,144	11,759	9,920
Contract work.....	587,431	—	29,313	—	27,500	—	—	32,140	4,081	1,831	2,294	—
Value of products.....	382,709,595	507,749	14,989,127	805,417	11,151,914	700,499	4,132,939	39,316,737	17,655,002	1,682,902	3,706,692	1,722,532
Value added by manufacture <sup>4</sup> .....	168,870,987	224,825	6,803,416	387,725	5,713,726	230,765	1,343,351	17,271,938	7,224,784	690,961	1,378,558	768,974

See footnotes at end of table.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939—Continued

ITEM	Louisiana	Maine	Maryland	Massachusetts	Michigan	Minnesota	Missouri	New Hampshire	New Jersey	New York	North Carolina	Ohio
Number of establishments <sup>1</sup> .....	9	6	25	117	29	15	46	7	67	329	21	75
Proprietors and firm members.....	1	-----	8	51	16	4	9	1	15	131	3	6
Persons reported by manufacturing establishments, total <sup>2</sup> .....	734	157	1,386	6,306	3,283	462	3,120	146	5,375	15,289	964	5,962
Salaried officers of corporations <sup>2</sup> .....	12	6	31	125	26	25	75	4	108	508	21	109
Manufacturing:												
Salaried employees <sup>2</sup> .....	67	8	107	582	211	27	226	19	428	997	46	496
Wage earners (average for the year) <sup>3</sup> .....	622	134	1,171	5,125	2,943	361	2,664	114	4,444	12,557	853	5,073
Distribution.....	33	9	71	435	92	49	147	9	349	1,189	43	268
Construction.....	-----	-----	2	31	11	-----	7	-----	22	34	-----	16
Other.....	-----	-----	4	8	-----	-----	1	-----	24	4	1	-----
Salaries and wages, total <sup>2</sup> .....	\$868,579	\$156,980	\$1,528,595	\$7,870,106	\$4,366,457	\$604,967	\$3,981,427	\$161,505	\$7,357,036	\$19,782,834	\$1,043,873	\$8,284,190
Salaried officers <sup>2</sup> .....	143,293	21,667	182,883	730,795	185,811	142,064	463,816	12,240	868,797	2,873,164	163,222	635,430
Manufacturing:												
Salaries <sup>2</sup> .....	128,087	13,155	159,688	1,023,626	407,169	49,829	404,239	30,763	869,415	1,884,578	93,860	1,030,430
Wages.....	535,665	109,069	1,016,587	5,183,098	3,502,989	323,244	2,698,739	98,344	4,770,775	12,587,684	698,974	5,970,292
Distribution.....	61,534	13,089	160,834	862,285	251,170	89,830	405,529	20,248	751,935	2,365,895	87,354	616,756
Construction.....	-----	-----	3,520	49,792	19,318	-----	8,324	-----	37,864	60,909	203	31,282
Other.....	-----	-----	5,083	20,510	-----	-----	780	-----	58,250	4,604	260	-----
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	2,675,059	226,829	3,520,430	16,694,539	13,490,227	976,975	9,019,150	387,413	16,204,664	34,939,314	2,393,942	10,889,689
Materials, supplies, and containers.....	2,651,379	219,133	3,458,650	16,338,967	13,338,579	952,551	8,901,194	381,265	15,883,885	34,174,949	2,354,735	19,421,849
Fuel.....	7,640	3,134	22,987	151,362	60,579	11,157	36,967	2,551	126,709	245,908	18,543	159,568
Purchased electric energy.....	16,040	4,562	38,793	184,459	76,436	12,084	80,911	3,597	165,445	420,672	20,664	150,174
Contract work.....	-----	-----	-----	19,751	14,633	1,183	-----	-----	28,625	97,785	-----	149,598
Value of products.....	4,537,551	494,912	6,114,940	29,616,614	20,850,957	1,890,236	16,045,365	740,303	29,793,025	66,885,977	4,500,404	34,912,792
Value added by manufacture <sup>4</sup> .....	1,862,492	268,083	2,594,510	12,922,075	7,360,730	913,261	7,026,215	352,890	13,588,361	31,946,663	2,106,462	15,023,103

  

ITEM	Oklahoma	Oregon	Pennsylvania	Rhode Island	Tennessee	Texas	Virginia	Washington	West Virginia	Wisconsin	Other States <sup>5</sup>
Number of establishments <sup>1</sup> .....	4	9	150	13	14	17	17	13	10	30	15
Proprietors and firm members.....	-----	3	113	5	3	2	11	2	4	8	4
Persons reported by manufacturing establishments, total <sup>2</sup> .....	178	164	7,305	523	827	505	846	598	703	2,106	744
Salaried officers of corporations <sup>2</sup> .....	5	9	166	15	19	15	13	19	10	39	20
Manufacturing:											
Salaried employees <sup>2</sup> .....	10	16	491	34	39	49	62	42	59	214	65
Wage earners (average for the year) <sup>3</sup> .....	140	133	6,201	450	742	404	726	511	615	1,700	590
Distribution.....	23	6	418	23	26	35	43	17	19	78	59
Construction.....	-----	-----	28	1	-----	2	2	9	-----	75	9
Other.....	-----	-----	1	-----	1	-----	-----	-----	-----	-----	1
Salaries and wages, total <sup>2</sup> .....	\$246,875	\$246,022	\$8,146,881	\$523,022	\$883,831	\$578,278	\$828,446	\$310,924	\$880,327	\$2,876,271	\$859,179
Salaried officers <sup>2</sup> .....	52,172	25,510	1,002,263	80,733	122,110	44,656	56,801	88,062	41,910	273,900	122,204
Manufacturing:											
Salaries <sup>2</sup> .....	21,983	29,868	813,435	56,190	72,173	120,465	100,830	80,601	99,255	415,659	103,955
Wages.....	133,251	133,330	5,523,916	351,450	632,480	337,358	602,611	591,037	697,071	1,962,442	487,536
Distribution.....	35,566	7,314	770,620	33,190	54,523	72,367	65,555	34,377	40,684	196,663	136,550
Construction.....	3,903	-----	36,309	1,459	-----	3,432	2,049	16,847	1,407	27,607	8,436
Other.....	-----	-----	338	-----	2,545	-----	-----	-----	-----	-----	698
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	748,898	334,008	16,352,824	435,319	2,137,464	1,524,009	2,548,089	2,347,587	2,940,492	7,488,257	2,230,643
Materials, supplies, and containers.....	739,249	326,522	15,898,223	400,988	2,101,284	1,502,773	2,511,013	2,327,449	2,895,697	7,353,254	2,193,965
Fuel.....	3,388	2,026	124,918	5,729	20,369	6,667	15,665	9,370	21,784	60,308	20,803
Purchased electric energy.....	6,261	6,060	179,715	6,462	15,861	14,499	21,411	9,101	18,454	74,568	15,685
Contract work.....	-----	-----	149,968	22,140	-----	70	-----	4,557	-----	127	90
Value of products.....	1,280,655	766,283	30,481,468	1,217,413	3,824,535	2,752,727	4,286,249	4,358,057	4,825,477	12,553,385	3,608,760
Value added by manufacture <sup>4</sup> .....	531,787	431,675	14,128,644	782,094	1,687,071	1,228,718	1,738,160	2,010,470	1,884,985	5,065,128	1,378,117

<sup>1</sup>See GENERAL EXPLANATIONS—Definition of establishment.<sup>2</sup>See GENERAL EXPLANATIONS—Persons engaged—general classification.<sup>3</sup>See GENERAL EXPLANATIONS—Wage earners and wages.<sup>4</sup>Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.<sup>5</sup>Alabama, 1 establishment; Delaware, 1; District of Columbia, 2; Nebraska, 3; South Carolina, 3; South Dakota, 1; Utah, 2; Vermont, 2.

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Paperboard Containers and Boxes Not Elsewhere Classified industry, all products, total value.....	\$382,709,595	\$394,786,932
Paperboard containers and boxes made in this industry.....	367,200,547	376,652,294
Miscellaneous products not classifiable.....	181,165	492,609
Other products (not classified in this industry).....	14,464,952	17,867,526
Receipts for contract and repair work.....	230,931	274,503
Paperboard containers and boxes, aggregate value.....	425,269,447	424,580,993
Paperboard containers and boxes made in this industry.....	367,200,547	376,652,294
Paperboard containers and boxes made as secondary products in other industries, total.....	58,068,900	47,928,699
Made in other industries within the "Converted paper products" subgroup.....	6,324,182	( <sup>1</sup> )
Made in the "Paper and paperboard mills" industry.....	48,778,888	( <sup>1</sup> )
Made in other industries outside the Paper and Allied Products group.....	2,965,830	( <sup>1</sup> )

<sup>1</sup> Principally value of merchandise bought and sold in same condition.<sup>2</sup> Principally value of bags, fiber cans, labels, dishes and spoons, cups, and other miscellaneous converted paper products.<sup>3</sup> No data.

## CENSUS OF MANUFACTURES: 1939

TABLE 4.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

	1939					1937
	Produced in the industry	Produced in other industries within the Converted Paper Products subgroup	Produced in the Paper and Paperboard Mills industry	Produced in other industries outside the Paper and Allied Products group	Aggregate	
Total value.....	\$367,200,547	\$6,324,182	\$48,778,888	<sup>1</sup> \$2,965,830	\$425,269,447	\$424,580,993
Boxes and containers:						
Shipping containers, corrugated.....	166,565,903	1,066,825	19,238,810	410,621	187,282,159	101,757,522
Shipping containers, solid-fiber.....	18,511,111	6,298	7,724,020	—	26,241,429	29,262,396
Cartons and folding boxes.....	102,439,446	937,583	21,589,139	1,906,565	126,872,733	119,062,925
Set-up paper boxes.....	72,809,455	391,276	95,962	644,144	73,940,837	77,945,275
Decorated, lithographed, lacquered, and fancy-covered boxes.....	5,697,996	253,763	—	—	5,951,759	2,836,922
Other boxes and containers.....	1,176,636	3,668,437	130,957	4,500	4,980,530	3,715,953

<sup>1</sup> Principally from "Printing, publishing, and allied industries" group and "Wooden containers" subgroup.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939 AND 1937, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	62,530	57,283	58,224	59,433	59,295	58,670	59,426	60,466	62,668	65,778	69,568	71,062	68,487
1937.....	62,620	60,879	61,687	63,412	63,959	63,234	62,806	62,012	62,583	63,552	64,656	62,881	59,778
Arkansas.....	102	89	102	103	108	101	89	87	94	103	115	118	109
California.....	1,907	1,724	1,720	1,782	1,791	1,786	1,829	1,889	1,943	2,037	2,159	2,114	2,109
Colorado.....	121	90	93	100	113	107	130	131	129	134	146	154	127
Connecticut.....	2,003	1,976	1,917	1,887	1,880	1,922	1,940	1,897	1,962	2,053	2,159	2,236	2,202
Florida.....	96	76	88	88	89	82	91	96	91	96	112	121	124
Georgia.....	521	468	478	472	492	513	495	505	515	557	592	573	588
Illinois.....	6,106	5,667	5,667	5,710	5,660	5,561	5,695	5,901	6,244	6,584	6,732	7,153	6,737
Indiana.....	2,419	2,304	2,304	2,339	2,335	2,251	2,196	2,344	2,419	2,522	2,658	2,761	2,599
Iowa.....	268	251	248	240	234	230	233	254	266	289	321	336	311
Kansas.....	487	440	439	444	454	459	461	469	493	517	561	554	551
Kentucky.....	227	219	213	221	211	206	206	202	211	237	265	266	264
Louisiana.....	622	562	566	616	625	585	650	645	643	663	639	643	630
Maine.....	134	109	121	119	116	114	127	141	160	160	160	155	136
Maryland.....	1,171	1,058	1,067	1,123	1,125	1,129	1,139	1,128	1,197	1,231	1,280	1,292	1,288
Massachusetts.....	5,125	4,777	4,973	5,065	4,858	4,888	4,838	4,924	5,017	5,298	5,719	5,689	5,450
Michigan.....	2,943	2,558	2,611	2,672	2,827	2,808	2,905	3,023	3,111	3,165	3,236	3,229	3,171
Minnesota.....	361	331	329	350	325	333	336	350	379	384	410	432	397
Missouri.....	2,664	2,582	2,550	2,590	2,579	2,484	2,578	2,623	2,670	2,747	2,791	2,884	2,884
Nebraska.....	199	186	188	187	188	197	195	193	193	204	231	214	209
New Hampshire.....	114	121	121	125	117	108	108	110	114	113	110	113	108
New Jersey.....	4,444	4,051	4,221	4,390	4,371	4,042	4,024	4,027	4,357	4,687	5,145	5,184	4,825
New York.....	12,557	11,542	11,708	11,989	11,852	11,828	11,996	12,113	12,521	13,212	14,035	14,189	13,703
North Carolina.....	853	706	732	755	773	781	798	805	894	973	1,028	1,030	967
Ohio.....	5,073	4,617	4,745	4,817	4,940	4,929	4,897	4,891	4,957	5,139	5,486	5,749	5,710
Oklahoma.....	140	128	133	132	130	138	141	162	143	138	146	143	141
Oregon.....	133	130	127	123	126	125	133	131	133	132	148	141	143
Pennsylvania.....	6,201	5,697	5,817	5,962	5,937	5,898	5,928	5,996	6,165	6,516	6,801	7,000	6,683
Rhode Island.....	450	370	409	442	442	394	406	454	486	501	479	540	476
South Carolina.....	36	3	5	4	3	5	16	22	60	80	87	72	74
Tennessee.....	742	712	706	702	695	711	713	732	719	758	800	835	821
Texas.....	404	347	362	367	375	395	395	361	356	410	490	511	476
Virginia.....	726	652	648	665	646	664	688	712	771	774	826	851	818
Washington.....	511	449	458	471	461	476	535	533	558	570	603	508	507
West Virginia.....	615	507	507	520	518	518	536	582	651	665	777	823	777
Wisconsin.....	1,700	1,518	1,551	1,576	1,569	1,570	1,626	1,678	1,679	1,760	1,910	2,025	1,943

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	1,338
Reporting expenditures for plant and equipment.....	836
Value of products:	
Total for the industry.....	\$382,709,595
Reporting expenditures for plant and equipment.....	322,325,136
Expenditures for plant and equipment:	
Total for the industry.....	11,039,775
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	3,336,026
Expenditures for new machinery and operating equipment.....	6,838,161
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	831,770
Expenditures unclassified.....	33,818

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$41,667,711	\$39,513,846
Finished products.....	15,611,869	14,256,625
Materials, supplies, etc.....	26,055,842	25,257,221
End of year, total.....	48,652,183	42,915,718
Finished products.....	17,336,801	16,488,638
Materials, supplies, etc.....	31,315,382	26,427,080
Value of products for the industry, total.....	382,709,595	394,786,932
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	376,560,673	378,418,061
Value for establishments not reporting inventories.....	6,148,922	16,368,871

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>

	1939
Number of establishments.....	1,338
Number of establishments reporting power equipment.....	1,330
Prime movers, aggregate:	
Number.....	86
Horsepower.....	8,354
Prime movers, driving generators, total—	
Number.....	46
Horsepower.....	6,487
Steam engines—	
Number.....	36
Horsepower.....	5,627
Diesel and semi-Diesel engines—	
Number.....	6
Horsepower.....	490
Other internal-combustion engines <sup>2</sup> —	
Number.....	2
Horsepower.....	70
Hydroturbines and water wheels—	
Number.....	2
Horsepower.....	300
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	422
Prime movers not driving generators, total—	
Number.....	40
Horsepower.....	1,867
Steam engines—	
Number.....	32
Horsepower.....	1,277
Steam turbines—	
Number.....	5
Horsepower.....	255
Diesel and semi-Diesel engines—	
Number.....	1
Horsepower.....	35

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>—Continued

	1939
Prime movers—Continued.	
Prime movers not driving generators—Continued.	
Other internal-combustion engines <sup>2</sup> —	
Number.....	1
Horsepower.....	20
Hydroturbines and water wheels—	
Number.....	1
Horsepower.....	280
Prime movers not driving generators, ordinarily idle (included above), horsepower.....	174
Generators, kilowatt rating, total.....	4,873
Generators, driven by—	
Steam engines, kilowatt rating.....	4,227
Diesel and semi-Diesel engines, kilowatt rating.....	330
Other internal-combustion engines, <sup>2</sup> kilowatt rating.....	85
Hydroturbines and water wheels, kilowatt rating.....	261
Generators, ordinarily idle (included above), kilowatt rating.....	316
Electric motors, total:	
Number.....	41,630
Horsepower.....	118,965
Driven by purchased energy—	
Number.....	37,590
Horsepower.....	105,291
Driven by energy generated in establishments reporting—	
Number.....	4,040
Horsepower.....	13,674
Electric energy (kilowatt-hours):	
Generated in plant.....	7,534,688
Sold.....	732,727
Purchased.....	91,514,972

<sup>1</sup> Comparable data for 1929 not available.<sup>2</sup> Gas, gasoline, etc.



# DIE-CUT PAPER AND PAPERBOARD, AND CONVERTED CARDBOARD

[A preliminary report for this industry was issued December 11, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of bottle caps, converted cardboard, photograph mats, folders, etc., and index, jacquard, library, and other cut cards.

**Statistics for prior census years.**—At the census for 1939, "Die-cut paper and paperboard, and converted cardboard" was first established as a separate industry. Returns for 1937 for establishments primarily engaged in the production of die-cut paper and paperboard, and converted cardboard, previously classified in the former "Cardboard not made in paper mills" and "Card cutting and designing" industries, and establishments manufacturing bottle caps were retabulated to obtain figures comparable with those for 1939. No revisions were

made, however, in the statistics for earlier years and therefore comparable figures are not available for years prior to 1937.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1939 AND 1937

CENSUS YEAR	Num-ber of estab-lish-ments <sup>1</sup>	Wage earners (aver-age for the year) <sup>2</sup>	Wages	Cost of ma-terials, sup-plies, fuel, pur-chased elec-tric en-ergy, and con-tract work	Value of products	Value added by manu-facture <sup>3</sup>	Horse-power of prime movers
1939.....	121	4,354	\$5,453,980	\$16,069,422	\$33,263,907	\$17,194,485	2,840
1937.....	115	5,046	6,063,598	15,519,540	34,043,743	18,524,203	( <sup>4</sup> )

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>4</sup> No comparable figures for years prior to 1937.

<sup>5</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	California	Illinois	Massachu-setts	New Jersey	New York	Ohio	Pennsyl-vania	Other States <sup>1</sup>
Number of establishments <sup>2</sup> .....	121	8	9	9	9	41	11	11	23
Proprietors and firm members.....	47	2	3	6	3	18	1	8	6
Persons reported by manufacturing establishments, total <sup>3</sup> .....	5,670	169	1,104	250	225	1,752	597	370	1,203
Salaried officers of corporations <sup>2</sup> .....	181	13	11	6	10	55	23	24	39
Manufacturing:									
Salaried employees <sup>2</sup> .....	534	18	91	37	16	170	34	40	128
Wage earners (average for the year) <sup>4</sup> .....	4,354	111	875	190	178	1,296	463	271	970
Distribution.....	568	21	123	15	15	223	75	33	58
Construction.....	19	2		2		3	2	2	8
Other.....	14	4	4		6				
Salaries and wages, total <sup>5</sup> .....	\$8,860,835	\$246,020	\$1,597,306	\$317,946	\$357,749	\$2,992,812	\$893,045	\$535,284	\$1,920,673
Salaried officers <sup>2</sup> .....	1,110,723	40,773	144,700	32,380	80,780	293,588	187,481	101,512	229,509
Manufacturing:									
Salaries <sup>2</sup> .....	1,032,786	18,142	209,752	56,964	29,434	354,854	60,490	60,839	242,311
Wages.....	5,453,980	135,856	991,436	197,584	193,833	1,809,930	496,263	295,047	1,334,041
Distribution.....	1,203,263	45,897	238,575	28,512	36,496	526,995	146,111	74,915	105,762
Construction.....	27,024	2,352		2,506		7,445	2,700	2,971	9,050
Other.....	33,049	3,000	12,843		17,206				
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	16,069,422	356,432	1,843,899	744,823	433,203	5,319,648	873,618	845,707	5,652,002
Materials, supplies, and containers.....	15,684,323	347,716	1,773,674	700,619	422,143	5,215,522	824,887	819,185	5,580,577
Fuel.....	127,706	1,017	25,219	10,442	1,984	35,944	9,011	23,000	21,089
Purchased electric energy.....	173,898	5,699	19,609	7,219	9,076	63,266	15,081	3,522	50,426
Contract work.....	83,495	2,000	25,397	26,543		4,916	24,639		
Value of products.....	33,263,907	839,729	5,294,418	1,289,122	1,072,566	10,807,937	2,427,088	1,794,373	9,738,624
Value added by manufacture <sup>5</sup> .....	17,194,485	483,297	3,450,519	544,299	639,363	5,488,339	1,553,470	948,666	4,086,532

<sup>1</sup> District of Columbia, 1 establishment; Indiana, 2; Iowa, 1; Kansas, 1; Michigan, 6; Missouri, 3; Nebraska, 1; Oregon, 1; Rhode Island, 3; West Virginia, 1; Wisconsin, 3.

<sup>2</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>3</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.

<sup>4</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>5</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Die-Cut Paper and Paperboard, and Converted Cardboard industry, all products, total value.....	\$33,263,907	\$34,043,743
Die-cut paper and paperboard and converted cardboard made in this industry.....	28,434,674	31,361,979
Miscellaneous products not classifiable.....	110,116	18,197
Other products (not classified in this industry).....	<sup>1</sup> 4,446,634	2,492,850
Receipts for contract and repair work.....	272,483	170,717
Die-cut paper and paperboard and converted cardboard, aggregate value.....	34,981,754	36,717,667
Die-cut paper and paperboard and converted cardboard made in this industry....	28,434,674	31,361,979
Die-cut paper and paperboard and converted cardboard made as secondary products in other industries.....	6,547,080	5,355,688
Made in the other industries within the "Converted paper products" sub-group.....	4,067,313	(2)
Made in "Paper and paperboard mills" industry.....	2,208,523	
Made in other industries outside the Paper and Allied Products group.....	271,244	

<sup>1</sup> Merchandise bought and sold in same condition.<sup>2</sup> Principally value of paper boxes, cans, envelopes, file folders, glazed and fancy paper, and waxed paper.<sup>3</sup> No data.

TABLE 4.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

	1939					1937
	Produced in the industry	Produced in other industries within the Converted Paper Products subgroup	Produced in the "Paper and Paperboard Mills" industry	Produced in other industries outside the Paper and Allied Products group	Aggregate	
Die-cut paper and paperboard, and converted cardboard, total value.....	\$28,434,674	\$4,067,313	\$2,208,523	<sup>1</sup> \$271,244	\$34,981,754	\$36,717,667
Bottle caps, paper.....	8,588,818	2,190,446			10,779,264	8,919,446
Cards, cut and designed:						
Index, library, etc., cards, plain.....	2,841,084	562,235		93,012	3,496,331	5,275,523
Jacquard cards for textile-fabric machines.....	248,730				248,730	287,270
Photograph mats, mounts, folders, etc.....	2,648,696	50,601			2,699,297	3,017,034
Other.....	7,196,930	738,973		178,232	8,114,135	11,948,448
Cardboard (converted).....	6,910,416	525,058	2,208,523		9,643,997	7,269,946

<sup>1</sup> Principally from the "Office furniture" industry.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939 AND 1937, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	4,354	4,225	4,221	4,248	4,230	4,312	4,130	4,254	4,252	4,401	4,600	4,604	4,676
1937.....	5,046	4,959	5,146	5,305	5,232	5,099	5,020	4,869	4,808	4,933	5,212	5,144	4,831
California.....	111	99	103	103	100	96	98	89	105	108	121	135	171
Illinois.....	875	863	851	860	885	878	869	857	845	862	921	888	920
Massachusetts.....	190	186	190	195	180	186	183	181	181	193	202	203	202
Michigan.....	444	361	375	394	346	425	314	447	455	576	542	538	557
Missouri.....	78	75	83	75	74	78	79	77	78	74	79	79	83
Missouri.....	78	75	83	75	74	78	79	77	78	74	79	79	83
New Jersey.....	178	164	164	173	173	178	177	178	181	185	186	188	190
New York.....	1,296	1,309	1,256	1,290	1,304	1,309	1,280	1,274	1,261	1,299	1,303	1,339	1,324
Ohio.....	463	435	463	443	447	440	432	445	439	471	503	510	531
Pennsylvania.....	271	262	259	265	273	267	258	263	275	275	281	290	279
Rhode Island.....	136	134	130	130	130	130	131	132	134	139	144	147	148
Wisconsin.....	73	65	66	67	76	76	76	76	75	75	74	74	74

## CENSUS OF MANUFACTURES: 1939

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	121
Reporting expenditures for plant and equipment.....	64
Value of products:	
Total for the industry.....	\$33,263,907
Reporting expenditures for plant and equipment.....	23,836,826
Expenditures for plant and equipment:	
Total for the industry.....	631,858
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	52,651
Expenditures for new machinery and operating equipment.....	532,805
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	46,402

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$3,941,204	\$3,576,895
Finished products.....	1,252,908	1,731,928
Materials, supplies, etc.....	2,688,296	1,844,967
End of year, total.....	4,200,231	3,892,889
Finished products.....	1,280,975	1,914,241
Materials, supplies, etc.....	2,919,256	1,978,648
Value of products for the industry, total.....	33,263,907	34,043,743
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	33,200,610	32,737,850
Value for establishments not reporting inventories.....	63,297	1,305,893

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>

	1939
Number of establishments.....	121
Number of establishments reporting power equipment.....	120
Prime movers, aggregate:	
Number.....	24
Horsepower.....	2,840
Prime movers, driving generators, total—	
Number.....	16
Horsepower.....	2,622
Steam engines—	
Number.....	12
Horsepower.....	2,197
Diesel and semi-Diesel engines—	
Number.....	4
Horsepower.....	425
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	125
Prime movers not driving generators, total—	
Number.....	8
Horsepower.....	218
Steam engines—	
Number.....	4
Horsepower.....	195

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>—Continued

	1939
Prime movers—Continued.	
Prime movers not driving generators—Continued.	
Steam turbines—	
Number.....	4
Horsepower.....	23
Generators, kilowatt rating, total.....	1,785
Generators, driven by—	
Steam engines, kilowatt rating.....	1,510
Diesel and semi-Diesel engines, kilowatt rating.....	275
Generators, ordinarily idle (included above), kilowatt rating.....	120
Electric motors, total:	
Number.....	3,032
Horsepower.....	8,569
Driven by purchased energy—	
Number.....	2,963
Horsepower.....	6,120
Driven by energy generated in establishments reporting—	
Number.....	609
Horsepower.....	2,449
Electric energy (kilowatt-hours):	
Generated in plant.....	1,848,229
Sold.....	422,550
Purchased.....	7,636,791

<sup>1</sup> Comparable data for 1929 not available.

# WALLPAPER

[A preliminary report for this industry was issued September 21, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in designing patterns and printing paper to cover interior walls and ceilings.

The "hanging paper" used as materials by these manufacturers is made in "Paper and paperboard mills" industry.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1899 TO 1939

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work <sup>3</sup>	Value of products	Value added by manufacture <sup>4</sup>	Horsepower of prime movers
1939.....	46	4,054	\$5,333,246	\$11,695,922	\$24,968,843	\$13,272,921	4,157
1937.....	42	4,543	5,455,289	11,919,748	26,771,995	14,852,247	( <sup>5</sup> )
1935.....	40	4,265	4,485,919	9,889,655	19,657,672	9,708,017	( <sup>5</sup> )
1933.....	39	3,239	3,115,690	6,851,079	15,799,514	8,948,435	( <sup>5</sup> )
1931.....	50	3,734	3,993,949	9,150,312	20,194,112	11,043,800	( <sup>5</sup> )
1929.....	56	4,705	5,731,932	13,480,205	30,007,649	16,527,444	6,660
1927.....	53	4,811	5,981,451	14,612,415	30,059,153	15,446,738	6,962
1925.....	49	5,069	5,862,765	14,999,041	30,069,005	15,069,964	6,241
1923.....	51	5,412	6,221,266	16,991,411	34,755,700	17,764,289	( <sup>5</sup> )
1921.....	43	3,988	4,981,572	16,336,110	29,147,905	12,811,795	( <sup>5</sup> )
1919.....	48	4,262	3,882,396	13,152,503	23,047,901	9,895,398	5,159
1914.....	48	4,738	2,703,175	8,536,255	15,887,123	7,350,868	5,668
1909.....	45	4,037	2,038,937	7,623,351	14,449,247	6,825,896	5,194
1904.....	44	3,913	1,868,213	6,658,165	12,636,580	5,978,415	4,257
1899.....	51	4,172	2,074,138	6,072,809	10,663,209	4,590,400	( <sup>5</sup> )

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>3</sup> Figures for years prior to 1935 do not include cost of contract work.

<sup>4</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

<sup>5</sup> Not called for on schedule.

<sup>6</sup> Data not available.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	Illinois	New York	Ohio	Pennsylvania	Other States <sup>1</sup>
Number of establishments <sup>2</sup> .....	46	13	11	4	9	9
Proprietors and firm members.....	7	3	1	—	3	—
Persons reported by manufacturing establishments, total <sup>3</sup> .....	4,885	1,675	1,238	179	1,185	608
Salaried officers of corporations <sup>4</sup> .....	81	15	24	8	15	19
Manufacturing:						
Salaried employees <sup>5</sup> .....	417	124	117	16	89	71
Wage earners (average for the year) <sup>6</sup> .....	4,054	1,472	961	139	1,000	482
Distribution.....	324	57	136	16	81	34
Construction.....	9	7	—	—	—	2
Other.....	—	—	—	—	—	—
Salaries and wages, total <sup>7</sup> .....	\$7,654,705	\$2,457,364	\$2,020,354	\$337,283	\$1,792,857	\$1,046,847
Salaried officers <sup>8</sup> .....	578,853	129,866	153,046	41,530	84,501	169,910
Manufacturing:						
Salaries <sup>9</sup> .....	887,020	284,421	223,872	41,216	193,143	144,368
Wages.....	5,333,246	1,825,884	1,338,295	208,552	1,319,124	641,591
Distribution.....	838,561	203,069	305,141	45,985	196,089	88,277
Construction.....	17,025	14,124	—	—	—	2,901
Other.....	—	—	—	—	—	—
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	11,695,922	4,600,773	2,403,351	451,639	2,522,366	1,717,793
Materials, supplies, and containers.....	11,265,164	4,446,482	2,303,609	436,418	2,431,007	1,647,648
Fuel.....	246,580	75,440	65,760	6,708	62,177	36,495
Purchased electric energy.....	164,796	61,234	33,982	8,513	27,339	28,728
Contract work.....	29,382	17,617	—	—	1,843	9,922
Value of products.....	24,968,843	9,153,072	5,914,474	950,561	5,485,273	3,465,463
Value added by manufacture <sup>10</sup> .....	13,272,921	4,552,299	3,511,123	498,922	2,962,907	1,747,670

<sup>1</sup> Connecticut, 1 establishment; Indiana, 2; Massachusetts, 2; New Jersey, 2; Wisconsin, 2.

<sup>2</sup> See GENERAL EXPLANATIONS—Definition of establishment.

<sup>3</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.

<sup>4</sup> See GENERAL EXPLANATIONS—Wage earners and wages.

<sup>5</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

## CENSUS OF MANUFACTURES: 1939

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Wallpaper industry, all products, total value.....	\$24,968,843	\$26,771,995
Wallpaper:		
Number of rolls.....	372,649,686	411,186,355
Value.....	\$24,953,799	\$26,771,546
Other products (not classified in this industry).....	<sup>1</sup> \$10,569	\$449
Receipts for contract and repair work.....	\$4,475	

<sup>1</sup> Value of job printing.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

All detail production figures available are included in table 3.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939, 1937, AND 1929, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	4,054	4,616	4,308	4,060	3,848	3,695	3,694	3,226	3,281	3,822	4,382	4,620	5,095
1937.....	4,543	5,164	4,297	4,521	4,630	4,401	4,277	4,002	3,834	4,245	4,776	5,144	5,229
1929.....	4,705	5,209	4,709	4,446	4,445	4,417	4,228	4,077	4,223	4,811	5,112	5,354	5,427
Illinois.....	1,472	1,638	1,527	1,454	1,423	1,290	1,218	1,157	1,329	1,511	1,545	1,670	1,907
New York.....	961	1,147	1,029	964	851	811	901	688	710	919	1,097	1,152	1,255
Ohio.....	139	154	147	147	136	135	128	134	101	144	146	147	151
Pennsylvania.....	1,000	1,168	1,128	1,052	1,013	1,016	1,001	775	719	817	1,061	1,094	1,165

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	46
Reporting expenditures for plant and equipment.....	34
Value of products:	
Total for the industry.....	\$24,968,843
Reporting expenditures for plant and equipment.....	21,113,494
Expenditures for plant and equipment:	
Total for the industry.....	231,698
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	82,285
Expenditures for new machinery and operating equipment.....	113,018
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	35,987
Expenditures unclassified.....	408

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$4,809,022	\$4,349,033
Finished products.....	3,171,133	2,781,011
Materials, supplies, etc.....	1,637,889	1,568,022
End of year, total.....	4,882,653	5,343,705
Finished products.....	3,196,391	3,276,539
Materials, supplies, etc.....	1,686,262	2,067,166
Value of products for the industry, total.....	24,968,843	26,771,995
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	24,968,843	25,972,690
Value for establishments not reporting inventories.....		799,305

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929

	1939	1929
Number of establishments.....	46	56
Number of establishments reporting power equipment.....	46	56

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939 AND 1929—Continued

	1939	1929
Prime movers, aggregate:		
Number.....	28	44
Horsepower.....	4,157	6,660
Prime movers, driving generators, total—		
Number.....	18	144
Horsepower.....	3,477	16,660
Steam engines—		
Number.....	16	139
Horsepower.....	3,105	15,843
Steam turbines—		
Number.....	1	15
Horsepower.....	350	1,817
Diesel and semi-Diesel engines—		
Number.....	1	
Horsepower.....	22	
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	50	
Prime movers not driving generators, total—		
Number.....	10	( <sup>1</sup> )
Horsepower.....	680	
Steam engines—		
Number.....	10	
Horsepower.....	680	
Generators, kilowatt rating, total.....	2,347	3,816
Generators, driven by—		
Steam engines, kilowatt rating.....	2,032	( <sup>1</sup> )
Steam turbines, kilowatt rating.....	300	
Diesel and semi-Diesel engines, kilowatt rating.....	15	
Generators, ordinarily idle (included above), kilowatt rating.....	35	( <sup>1</sup> )
Electric motors, total:		
Number.....		
Horsepower.....	1,856	1,267
Driven by purchased energy—		
Number.....		
Horsepower.....	1,437	883
Driven by energy generated in establishments reporting—		
Number.....	8,424	6,080
Horsepower.....		
Electric energy (kilowatt-hours):		
Generated in plant.....	419	384
Purchased.....	2,270	3,395
	896,635	( <sup>1</sup> )
	8,714,547	5,008,129

<sup>1</sup> Includes data for prime movers not driving generators.<sup>2</sup> Not called for on schedule.<sup>3</sup> Data not available.

## CONVERTED PAPER PRODUCTS NOT ELSEWHERE CLASSIFIED

[A preliminary report for this industry was issued December 23, 1940]

**Description of the industry.**—This industry, as classified for census purposes, embraces establishments primarily engaged in the manufacture, from purchased stock, of crepe paper, cups, dishes, etc., egg-case fillers, paper napkins and towels, papeteries, playing cards, paper patterns, tags, seals, soda straws, tablets, toilet paper, facial tissue, etc.

**Statistics for prior census years.**—At the census for 1939, several changes were made in the converted paper products industry classifications, and returns for establishments formerly classified as "Paper goods not elsewhere classified" were transferred to other industry classifications, such as "Coated and glazed paper," "Fiber cans, tubes, and similar products," and "Die-cut paper and paperboard, and converted cardboard." The data for establishments classified in other industries were deducted from the "Paper goods not elsewhere classified" industry as constituted for 1937, and form the respective new classifications for comparison with 1939. Likewise, printed, lithographed, stencil, and em-

broidery paper patterns were, prior to 1939, included in the "Printing and publishing" industry but are now included in this industry. The product data for 1937 have been adjusted accordingly. No revisions were made in the statistics for years prior to 1937 for any of the product classifications mentioned above. Therefore, comparable figures are not available for prior years.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1939 AND 1937

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work	Value of products	Value added by manufacture <sup>3</sup>	Horse-power of prime movers
1939.....	384	21,775	\$22,184,555	\$83,375,081	\$161,305,558	\$77,930,477	8,839
1937.....	378	22,898	23,479,483	87,564,276	166,587,043	79,022,767	( <sup>4</sup> )

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.  
<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.  
<sup>3</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.  
<sup>4</sup> No comparable figures for years prior to 1937.  
<sup>5</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	California	Connecticut	Illinois	Indiana	Massachusetts	Michigan
Number of establishments <sup>1</sup> .....	384	20	9	30	17	54	16
Proprietors and firm members.....	146	10	.....	19	3	13	11
Persons reported by manufacturing establishments, total <sup>2</sup> .....	28,301	505	715	1,758	1,036	5,094	2,510
Salaried officers of corporations <sup>3</sup> .....	539	13	7	34	34	99	20
Manufacturing:							
Salaried employees <sup>3</sup> .....	2,791	65	62	95	139	500	267
Wage earners (average for the year) <sup>3</sup> .....	21,775	347	560	1,410	819	3,568	1,947
Distribution.....	2,983	80	58	208	37	882	255
Construction.....	188	.....	28	10	7	27	21
Other.....	25	.....	.....	1	.....	18	.....
Salaries and wages, total <sup>4</sup> .....	\$36,827,482	\$701,224	\$926,532	\$2,422,786	\$1,193,843	\$7,066,652	\$3,430,688
Salaried officers <sup>3</sup> .....	3,793,138	59,800	56,072	274,041	211,078	753,740	189,480
Manufacturing:							
Salaries <sup>3</sup> .....	4,907,239	123,525	114,037	218,770	203,815	927,086	467,426
Wages.....	22,184,555	385,668	606,052	1,462,620	678,762	3,921,065	2,326,632
Distribution.....	5,571,543	132,231	107,235	446,164	91,740	1,380,919	416,875
Construction.....	318,448	.....	43,136	19,675	8,448	37,754	30,275
Other.....	52,559	.....	.....	1,516	.....	46,088	.....
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	\$8,375,081	1,606,162	1,244,835	4,668,948	2,064,739	11,741,270	6,262,227
Materials, supplies, and containers.....	81,830,783	1,575,489	1,201,152	4,517,445	1,973,636	11,475,865	6,118,049
Fuel.....	564,756	949	16,965	21,900	40,423	124,397	72,317
Purchased electric energy.....	799,749	17,214	26,718	61,407	50,630	100,367	71,177
Contract work.....	179,793	12,510	.....	68,196	50	40,641	684
Value of products.....	161,305,558	3,794,475	3,386,114	12,896,104	3,889,401	23,001,985	12,746,264
Value added by manufacture <sup>5</sup> .....	77,930,477	2,188,313	2,141,279	8,227,156	1,824,662	11,260,715	6,484,907

See footnotes at end of table.

## CENSUS OF MANUFACTURES: 1939

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939—Continued

ITEM	Missouri	New Jersey	New York	Ohio	Pennsyl- vania	Wisconsin	Other States <sup>1</sup>
Number of establishments <sup>1</sup> .....	8	17	121	13	27	15	37
Proprietors and firm members.....	8	7	58	3	5	-----	9
Persons reported by manufacturing establishments, total <sup>2</sup> .....	1, 141	1, 418	5, 523	1, 452	2, 010	1, 583	2, 656
Salaried officers of corporations <sup>3</sup> .....	13	37	138	15	56	21	52
Manufacturing:							
Salaried employees <sup>3</sup> .....	133	96	541	166	365	102	260
Wage earners (average for the year) <sup>4</sup> .....	948	1, 030	4, 191	1, 102	2, 344	1, 291	2, 218
Distribution.....	35	253	581	169	137	163	125
Construction.....	12	2	68	-----	8	4	1
Other.....	-----	-----	4	-----	-----	2	-----
Salaries and wages, total <sup>2</sup> .....	\$1, 427, 183	\$1, 955, 019	\$6, 911, 970	\$2, 224, 468	\$3, 489, 884	\$2, 074, 432	\$3, 002, 801
Salaried officers <sup>3</sup> .....	112, 780	252, 398	926, 357	127, 689	452, 901	100, 990	275, 812
Manufacturing:							
Salaries <sup>3</sup> .....	281, 994	196, 936	885, 656	349, 290	531, 853	166, 695	440, 156
Wages.....	864, 215	1, 049, 044	3, 939, 728	1, 384, 891	2, 146, 536	1, 473, 944	1, 945, 398
Distribution.....	148, 214	452, 172	1, 031, 362	362, 598	344, 504	322, 370	335, 159
Construction.....	19, 980	4, 469	124, 824	-----	14, 090	9, 521	6, 276
Other.....	-----	-----	4, 043	-----	-----	912	-----
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	3, 272, 259	4, 162, 805	14, 925, 022	5, 648, 127	6, 703, 048	12, 247, 110	8, 828, 529
Materials, supplies, and containers.....	3, 166, 596	4, 085, 887	14, 682, 934	5, 577, 604	6, 570, 979	12, 152, 671	8, 732, 476
Fuel.....	41, 002	37, 041	55, 406	44, 993	39, 114	40, 219	30, 030
Purchased electric energy.....	62, 160	39, 877	153, 340	25, 484	92, 348	43, 004	56, 023
Contract work.....	2, 501	-----	33, 842	40	607	11, 216	10, 000
Value of products.....	5, 464, 708	7, 348, 030	30, 419, 405	11, 428, 142	13, 226, 815	17, 617, 982	16, 086, 103
Value added by manufacture <sup>4</sup> .....	2, 192, 449	3, 185, 225	15, 404, 383	5, 780, 015	6, 523, 767	5, 370, 872	7, 257, 574

<sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.<sup>2</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.<sup>3</sup> See GENERAL EXPLANATIONS—Wage earners and wages.<sup>4</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.<sup>5</sup> District of Columbia, 1 establishment; Georgia, 4; Iowa, 2; Kentucky, 1; Louisiana, 1; Maine, 1; Maryland, 2; Minnesota, 3; Nebraska, 1; New Hampshire, 1; North Carolina, 1; Oregon, 2; Rhode Island, 1; South Carolina, 1; Tennessee, 3; Texas, 3; Vermont, 1; Virginia, 4; Washington, 4.

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Converted Paper Products Not Elsewhere Classified industry, all products, total value.....	\$161, 305, 558	\$106, 587, 043
Converted paper products made in this industry.....	134, 970, 923	143, 445, 045
Miscellaneous products not classifiable.....	<sup>1</sup> 745, 702	507, 318
Other products (not classified in this industry).....	<sup>2</sup> 25, 241, 557	22, 167, 816
Receipts for contract and repair work.....	347, 376	466, 864
Converted paper products, aggregate value.....	227, 517, 949	216, 175, 312
Converted paper products made in this industry.....	134, 970, 923	143, 445, 045
Converted paper products made as secondary products in other industries, total.....	92, 547, 026	72, 730, 267
Made in the industries within the "Converted paper products" subgroup.....	14, 788, 320	(3)
Made in the "Paper and paperboard mills" industry.....	63, 327, 994	
Made in other industries outside the Paper and Allied Products group.....	14, 430, 712	

<sup>1</sup> Principally value of merchandise bought and sold in same condition.<sup>2</sup> Principally value of paper bags, paper boxes, labels and tags (printed), loose-leaf binders and files, sanitary napkins, and coated and glazed paper.<sup>3</sup> No data.

# CONVERTED PAPER PRODUCTS NOT ELSEWHERE CLASSIFIED

675

TABLE 4.—PRODUCTS, BY KIND AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

	1939					1937
	Produced in the industry	Produced in other industries within the Converted Paper Products sub-group	Produced in the Paper and Paperboard Mills industry	Produced in other industries outside the Paper and Allied Products group	Aggregate	
Total value.....	\$134,970,923	\$14,788,320	\$63,827,994	\$14,430,712	\$227,517,949	\$216,175,312
Coin wrappers.....	376,988	50		145,578	522,616	528,968
Confetti.....	37,878				37,878	(2)
Crepe paper.....	2,548,968	371,725	54,960		2,975,643	3,174,623
Cups, paper, total.....	16,125,180	1,287,810			17,412,990	13,641,932
Round.....	12,219,069	713,704			12,932,773	11,401,951
Conical or wedge-shaped, nested.....	3,204,776	264,614			3,469,390	
Flat.....	701,335	309,492			1,010,827	2,239,981
Dishes, spoons, etc., paper.....	1,675,703	1,138,458		34,095	2,848,256	3,040,637
Egg-case fillers and flats.....	588,408	277,235	660,467	165,079	1,691,189	1,817,122
Facial tissue and handkerchiefs.....	3,601,197		5,631,310	2,885,816	12,118,323	8,776,078
File folders.....	1,637,743	946,349			2,584,092	1,402,547
Labels, paper, unprinted.....	521,671	203,038			724,709	
Napkins, paper.....	5,257,373	496,652	4,637,767	28,315	10,420,107	11,029,608
Papeteries, total.....	9,746,253	247,480	2,361	500,295	10,496,389	9,862,232
Unprinted.....	8,645,505	212,338	2,361	500,295	9,360,499	6,718,169
Printed.....	1,100,748	35,142			1,135,890	3,144,063
Patterns, paper, total.....	5,078,762	45,399		5,122,388	10,246,549	9,970,773
Printed and lithographed.....	1,161,967	45,399		2,493,156	3,700,522	3,199,064
Unprinted.....	3,916,795			1,081,739	4,998,534	4,427,485
Stencil or embroidery.....				1,547,493	1,547,493	2,344,224
Rolls, paper (for adding machines, telegraph tape, etc.).....	1,310,573	349,858		1,120,131	2,780,562	3,188,022
Tablets, total.....	8,943,367	939,029	687,544		10,569,940	10,224,286
Book.....	1,706,172	160,549	178,680		2,045,401	1,659,949
News.....	1,931,317	52,318	25,957		2,009,592	2,270,313
Writing.....	4,814,983	598,277	271,199		5,684,459	5,574,529
Other.....	490,895	127,885	211,708		830,488	719,495
Tags (paper and paperboard), unprinted.....	1,550,525	155,282		195,074	1,900,881	1,695,590
Toilet paper.....	12,308,153	171,194	26,537,268		39,016,620	35,263,032
Towels, paper.....	4,309,221	293,825	10,749,353		15,352,399	12,141,940
Other converted paper and paperboard products <sup>1</sup> .....	59,352,965	7,864,936	14,366,964	4,233,941	85,818,806	90,317,892

<sup>1</sup> Principally from "Printing, publishing, and allied industries," "Miscellaneous industries," "Machinery (except electrical)," "Chemicals and allied products," and "Furniture and finished lumber products" groups.

<sup>2</sup> Not shown separately to avoid disclosing data for individual establishments; data included in "Other converted paper and paperboard products."

<sup>3</sup> Not called for on schedule.

<sup>4</sup> Includes other stationery.

<sup>5</sup> Cigarette paper, lace paper, playing cards, and miscellaneous paper products for all years; in addition, seals for 1939; confetti for 1937.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939 AND 1937, AND BY STATES, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	21,775	20,319	20,832	21,208	20,992	21,280	21,428	21,672	21,675	22,848	23,422	23,073	22,552
1937.....	22,898	22,234	22,278	22,817	23,128	23,265	23,603	23,704	23,355	23,375	23,144	22,372	21,497
California.....	347	276	270	268	255	314	378	394	422	404	416	398	365
Connecticut.....	560	560	562	541	555	571	573	553	554	545	551	584	575
Georgia.....	342	293	334	359	355	344	352	396	363	367	358	340	307
Illinois.....	1,410	1,273	1,285	1,287	1,296	1,334	1,386	1,453	1,533	1,591	1,568	1,529	1,839
Indiana.....	819	782	791	772	737	804	837	855	834	834	880	842	855
Massachusetts.....	3,568	3,396	3,447	3,453	3,521	3,503	3,476	3,476	3,461	3,646	3,879	3,800	3,752
Michigan.....	1,947	1,971	2,013	2,058	1,846	1,797	1,650	1,638	1,607	2,210	2,305	2,086	2,188
Minnesota.....	114	114	115	113	113	111	111	115	114	115	115	119	118
Missouri.....	948	962	971	977	934	916	933	954	968	917	941	946	955
New Jersey.....	1,030	944	1,015	1,043	1,049	1,059	1,084	1,048	1,026	1,020	983	1,045	1,043
New York.....	4,191	3,816	3,963	4,215	4,156	4,199	4,132	4,132	4,109	4,296	4,519	4,427	4,279
Ohio.....	1,102	1,117	1,132	1,067	1,082	1,044	1,054	1,063	1,066	1,083	1,176	1,172	1,187
Pennsylvania.....	2,344	1,974	2,086	2,137	2,105	2,386	2,580	2,645	2,501	2,559	2,376	2,418	2,297
Tennessee.....	165	134	132	168	156	157	152	182	188	186	171	168	187
Texas.....	78	66	84	79	81	85	86	86	90	85	85	56	58
Virginia.....	124	116	118	126	126	125	121	138	128	131	117	118	120
Washington.....	468	457	444	448	445	463	459	438	460	490	489	514	503
Wisconsin.....	1,291	1,219	1,229	1,210	1,218	1,189	1,218	1,252	1,298	1,367	1,423	1,463	1,401



TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	384
Reporting expenditures for plant and equipment.....	240
Value of products:	
Total for the industry.....	\$161,305,558
Reporting expenditures for plant and equipment.....	145,059,120
Expenditures for plant and equipment:	
Total for the industry.....	2,768,630
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	515,898
Expenditures for new machinery and operating equipment.....	2,056,095
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	186,635
Expenditures unclassified.....	10,002

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$23,460,071	\$21,524,439
Finished products.....	10,090,754	8,985,031
Materials, supplies, etc.....	13,369,317	12,539,408
End of year, total.....	26,476,995	26,705,399
Finished products.....	10,829,130	11,417,654
Materials, supplies, etc.....	15,647,865	15,287,745
Value of products for the industry, total.....	161,305,558	166,587,043
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	160,486,361	158,342,468
Value for establishments not reporting inventories.....	819,197	8,244,575

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>

	1939
Number of establishments.....	384
Number of establishments reporting power equipment.....	383
Prime movers, aggregate:	
Number.....	38
Horsepower.....	8,839
Prime movers, driving generators, total—	
Number.....	28
Horsepower.....	7,859

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939—Continued

	1939
Prime movers—Continued.	
Prime movers, driving generators—Continued.	
Steam engines—	
Number.....	16
Horsepower.....	6,000
Steam turbines—	
Number.....	2
Horsepower.....	169
Diesel and semi-Diesel engines—	
Number.....	3
Horsepower.....	920
Other internal-combustion engines <sup>2</sup> —	
Number.....	1
Horsepower.....	20
Hydroturbines and water wheels—	
Number.....	6
Horsepower.....	750
Prime movers, driving generators, ordinarily idle (included above), horsepower.....	1,195
Prime movers not driving generators, total—	
Number.....	10
Horsepower.....	980
Steam engines—	
Number.....	1
Horsepower.....	100
Other internal-combustion engines <sup>2</sup> —	
Number.....	3
Horsepower.....	50
Hydroturbines and water wheels—	
Number.....	6
Horsepower.....	830
Prime movers not driving generators, ordinarily idle (included above), horsepower.....	40
Generators, kilowatt rating, total.....	5,280
Generators, driven by—	
Steam engines, kilowatt rating.....	4,045
Steam turbines, kilowatt rating.....	86
Diesel and semi-Diesel engines, kilowatt rating.....	690
Other internal-combustion engines <sup>2</sup> kilowatt rating.....	10
Hydroturbines and water wheels, kilowatt rating.....	449
Generators, ordinarily idle (included above), kilowatt rating.....	875
Electric motors, total:	
Number.....	15,425
Horsepower.....	43,245
Driven by purchased energy—	
Number.....	12,412
Horsepower.....	33,207
Driven by energy generated in establishments reporting—	
Number.....	3,013
Horsepower.....	10,038
Electric energy (kilowatt-hours):	
Generated in plant.....	9,064,391
Purchased.....	44,936,061

<sup>1</sup> Comparable data for 1929 not available.<sup>2</sup> Gas, gasoline, etc.

# PULP GOODS (PRESSED, MOLDED)

[A preliminary report for this industry was issued October 31, 1940]

**Description of the industry.**—This industry, as constituted for census purposes, embraces establishments primarily engaged in the manufacture of all kinds of pressed and molded pulp goods, such as pulp plates, utensils, and all papier-mâché articles except statuary.

**Statistics for prior census years.**—At the census for 1939, "Pulp goods (pressed, molded)" was established as a separate industry. Returns for establishments formerly classified in the "Synthetic-resin, cellulose-plastic, vulcanized-fiber, and molded and pressed pulp fabricated articles, not elsewhere classified" industry were deducted from the statistics for that industry for 1937 and form the new industry classification, "Pulp goods (pressed, molded)" for comparison with 1939. No revisions were made, however, in the statistics for years prior to 1937 and therefore comparable statistics for earlier years are not available.

TABLE 1.—SUMMARY FOR THE UNITED STATES: 1939 AND 1937

CENSUS YEAR	Number of establishments <sup>1</sup>	Wage earners (average for the year) <sup>2</sup>	Wages	Cost of materials, supplies, fuel, purchased electric energy, and contract work	Value of products	Value added by manufacture <sup>3</sup>	Horsepower of prime movers
1939.....	14	701	\$818,699	\$1,522,772	\$3,826,393	\$2,303,621	2,070
1937 <sup>4</sup> .....	10	819	873,095	1,474,554	4,041,554	2,556,990	(9)

- <sup>1</sup> See GENERAL EXPLANATIONS—Definition of establishment.  
<sup>2</sup> See GENERAL EXPLANATIONS—Wage earners and wages.  
<sup>3</sup> Value of products less cost of materials, supplies, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.  
<sup>4</sup> No comparable figures for years prior to 1937.  
<sup>5</sup> Not called for on schedule.

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939  
[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

ITEM	United States	New York	Other States <sup>1</sup>
Number of establishments <sup>1</sup> .....	14	4	10
Proprietors and firm members.....	4	1	3
Persons reported by manufacturing establishments, total <sup>2</sup> .....	856	173	683
Salaried officers of corporations <sup>3</sup> .....	18	3	15
Manufacturing:			
Salaried employees <sup>4</sup> .....	75	6	69
Wage earners (average for the year) <sup>4</sup> .....	701	164	537
Distribution.....	62		62
Other.....			
Salaries and wages, total <sup>5</sup> .....	\$1,080,929	\$205,561	\$875,368
Salaried officers <sup>1</sup> .....	86,531	30,921	55,610
Manufacturing:			
Salaries <sup>1</sup> .....	103,494	18,347	85,147
Wages.....	818,699	156,293	662,406
Distribution.....	72,205		72,205
Other.....			

TABLE 2.—GENERAL STATISTICS IN DETAIL BY STATES: 1939—Continued

ITEM	United States	New York	Other States <sup>1</sup>
Cost of materials, supplies, containers, fuel, purchased electric energy, and contract work, total.....	1,522,772	265,774	1,256,998
Materials, supplies, and containers.....	1,225,994	224,788	1,001,196
Fuel.....	116,158	30,789	85,369
Purchased electric energy.....	180,620	10,187	170,433
Contract work.....			
Value of products.....	3,826,393	700,973	3,125,420
Value added by manufacture <sup>2</sup> .....	2,303,621	435,199	1,868,422

- <sup>1</sup> Illinois, 1 establishment; Maine, 1; Michigan, 2; New Hampshire, 1; New Jersey, 2; Ohio, 1; Wisconsin, 2.  
<sup>2</sup> See GENERAL EXPLANATIONS—Definition of establishment.  
<sup>3</sup> See GENERAL EXPLANATIONS—Persons engaged—general classification.  
<sup>4</sup> See GENERAL EXPLANATIONS—Wage earners and wages.  
<sup>5</sup> Value of products less cost of materials, supplies, containers, fuel, purchased electric energy, and contract work. See GENERAL EXPLANATIONS—Value added by manufacture.

TABLE 3.—VALUE OF PRODUCTS FOR THE UNITED STATES: 1939 AND 1937

	1939	1937
Pulp Goods (Pressed, Molded) industry, all products, total value.....	\$3,826,393	\$4,041,554
Pulp goods (pressed, molded) made in this industry.....	3,587,393	4,041,554
Other products (not classified in this industry).....	239,000	
Pressed and molded pulp goods, aggregate value.....	3,746,839	4,765,341
Pressed and molded pulp goods made in this industry.....	3,587,393	4,041,554
Pressed and molded pulp goods made as secondary products in other industries.....	159,446	723,787

- <sup>1</sup> Principally value of radio replacement parts and toys.  
<sup>2</sup> From "Pulp mills," "Planing mills not operated in conjunction with sawmills," and "Radios, radio tubes, and phonographs" industries.

TABLE 4.—PRODUCTS, BY KIND, QUANTITY, AND VALUE, FOR THE UNITED STATES: 1939 AND 1937

No detailed production figures are collected for this industry.

TABLE 5.—WAGE EARNERS ENGAGED IN MANUFACTURING, BY MONTHS, FOR THE UNITED STATES, 1939 AND 1937, AND FOR NEW YORK, 1939

[See GENERAL EXPLANATIONS—Disclosure of data for individual establishments]

STATE	Average number employed during year	NUMBER RECEIVING PAY DURING NORMAL PAY-ROLL PERIOD ENDED NEAREST 15TH OF MONTH—											
		January	February	March	April	May	June	July	August	September	October	November	December
United States:													
1939.....	701	642	679	707	658	635	650	652	670	722	778	817	798
1937.....	819	792	743	818	822	826	842	857	836	945	907	700	738
New York.....	164	194	193	209	162	174	150	125	121	148	154	164	171

TABLE 6.—EXPENDITURES FOR PLANT AND EQUIPMENT: 1939

	1939
Number of establishments:	
Total for the industry.....	14
Reporting expenditures for plant and equipment.....	8
Value of products:	
Total for the industry.....	\$3,826,393
Reporting expenditures for plant and equipment.....	3,080,597
Expenditures for plant and equipment:	
Total for the industry.....	73,565
Expenditures for new construction or major alterations of buildings and other fixed plant and structures.....	3,487
Expenditures for new machinery and operating equipment.....	69,828
Expenditures for plant and equipment acquired in a "used" condition from other owners and expenditures for land.....	250

TABLE 7.—VALUE OF INVENTORIES OF MATERIALS AND FINISHED PRODUCTS, AND VALUE OF PRODUCTS: 1939 AND 1937

	1939	1937
Inventories:		
Beginning of year, total.....	\$671,683	\$403,210
Finished products.....	439,750	202,821
Materials, supplies, etc.....	231,933	200,389
End of year, total.....	551,333	511,572
Finished products.....	282,862	314,239
Materials, supplies, etc.....	268,471	197,333
Value of products for the industry, total.....	3,826,393	4,041,554
Value for establishments reporting inventories (includes value of products of establishments reporting no inventories on hand).....	3,826,393	4,041,554

TABLE 8.—PRIME MOVERS, MOTORS, GENERATORS, AND ELECTRIC ENERGY: 1939<sup>1</sup>

	1939
Number of establishments.....	14
Number of establishments reporting power equipment.....	14
Prime movers, aggregate:	
Number.....	3
Horsepower.....	2,070
Prime movers, driving generators, total—	
Number.....	3
Horsepower.....	2,070
Steam engines—	
Number.....	2
Horsepower.....	2,025
Diesel and semi-Diesel engines—	
Number.....	1
Horsepower.....	46
Generators, kilowatt rating, total.....	1,384
Generators, driven by—	
Steam engines, kilowatt rating.....	1,350
Diesel and semi-Diesel engines, kilowatt rating.....	34
Electric motors, total:	
Number.....	550
Horsepower.....	5,161
Driven by purchased energy—	
Number.....	425
Horsepower.....	3,921
Driven by energy generated in establishments reporting—	
Number.....	125
Horsepower.....	1,240
Electric energy (kilowatt-hours):	
Generated in plant.....	1,358,798
Purchased.....	43,586,522

<sup>1</sup> Comparable data for 1929 not available.